

PERMIT NUMBER: B 22.001023

DATE ACCEPTED: 3/21/22



RESIDENTIAL BUILDING PERMIT APPLICATION

HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES, AND PERMITS
3430 COURT HOUSE DRIVE, ELLICOTT CITY, MD 21043 - PHONE: (410) 313-2455 OPTION #4
www.howardcountymd.gov

BUILDING SITE ADDRESS REQUIRED

Street Address: 14393 DORSEY MILL ROAD Unit: _____
 City: GLENWOOD State: MD Zip Code: 21738
 Subdivision/Village/Complex Name: _____ SDP/WP/BA #: _____
 Lot: 02 Tax Map: _____ Parcel: _____ Grading Permit #: _____

DESCRIPTION OF WORK REQUIRED

Existing Use: SED Proposed Use: SED with 16x20 addition Estimated Cost: \$ 125,000
 Trade Work to Be Completed (Separate Permits Required): Mechanical (HVACR) Electrical Plumbing None
 Build new 16'x20' end garage addition with fireplace over crawl space
 2nd floor 15'9" x 10' ground level deck with stairs
 GAS fireplace

PROPERTY OWNER INFORMATION REQUIRED

Owner(s) Name(s) (As it appears on tax records): Christy + Scott Zuker Primary Residence: Yes No
 Owner's Street Address: 14393 DORSEY MILL ROAD
 City: Glenwood State: MD Zip Code: 21738
 Phone: 443-745-3524 Email: zukerchris@verizon.net

APPLICANT NAME REQUIRED - INDIVIDUAL WHO SIGNS THIS APPLICATION

Business Name: Barn Builders, Inc Contact Name: DANA BOCK
 Street Address: 1364 TRIPPLE HILL RD
 City: GLENELS State: MD Zip Code: 21737
 Phone: 410-284-2486 Email: barnbuildersinc@barnbuilders.com

CONTRACTOR INFORMATION REQUIRED

Business Name: SAME AS APPLICANT
 Licensee's Name: DANA BOCK License #: 96084
 Street Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Email: _____

ARCHITECT/ENGINEER INFORMATION INDIVIDUAL WHO SIGNED PLANS, IF APPLICABLE

Business Name: JB HOME DESIGN Name: JON BUTZ
 Street Address: 9416 CONCORD COURT
 City: RATHBONE State: MD Zip Code: 21234
 Phone: 410-596-9537 Email: jon@jbhomedesign.com

BUILDING CHARACTERISTICS REQUIRED

Primary Structure: SF Dwelling SF Townhouse SF Duplex Mobile Home Multi-Family Dwelling (MF*) Condo: Yes No
 Utilities: Electric Gas Water Supply: Public Private (Well) Sewage Disposal: Public Private (Septic)
 Heating System: Electric Natural Gas Propane Other: _____ Roadside Tree Project: No Yes: # _____
 Sprinkler System: NFPA 13 NFPA 13R NFPA 13D None Fire Alarm System: Yes No Voice Evac

ADDITIONAL RESIDENTIAL INFORMATION (PLEASE SELECT/COMPLETE ALL THAT APPLY)

Model Name & Options: Sumpcon
 # of Bedrooms (SF): _____ # of efficiency units (MF*): _____ # of 1 BR (MF*): _____ # of 2 BR (MF*): _____ # of 3 BR (MF*): _____
 # Rooms: _____ # Full Baths: _____ # Half Baths: _____ # Fireplaces: 1
 Garage/Carport Info: Attached Garage Detached Garage Integral Garage Carport None
 Basement/Foundation Info: Slab on Grade Post & Pier Unfinished Basement Finished Basement: Full or Partial CRAWL
 1st Fl Width: _____ 1st Fl Depth: _____ 2nd Fl Width: _____ 2nd Fl Depth: _____ Bsmt Width: _____ Bsmt Depth: _____
 Energy Method: Prescriptive Performance UA Alternative ERI Gross Area: 326 sq ft Occupiable Area: 326 sq

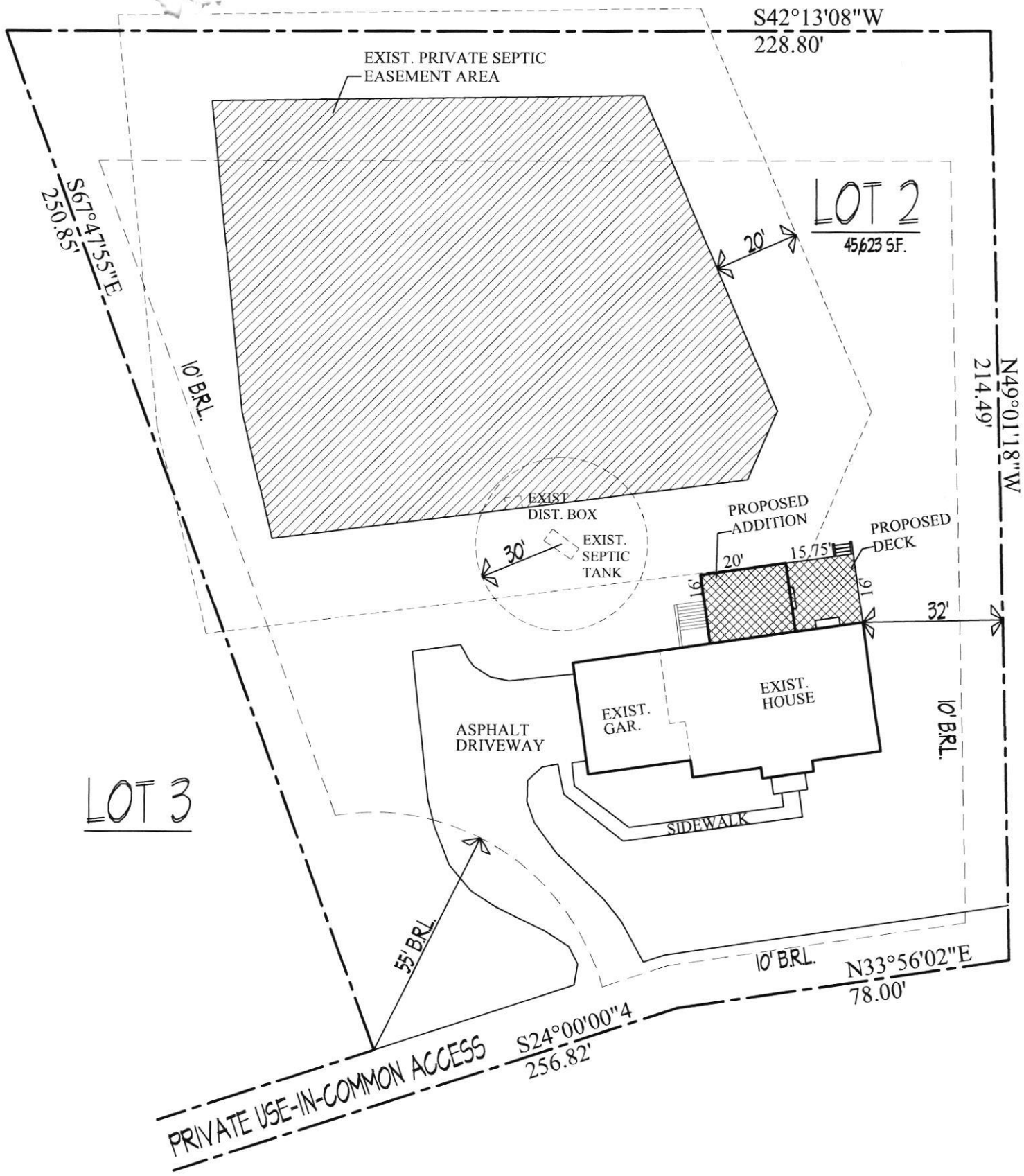
AGREEMENT/ DISCALIMER REQUIRED

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

APPLICANT'S ORIGINAL SIGNATURE: [Signature] DATE SIGNED: 3/21/22

FOR OFFICE USE ONLY CHECKS PAYABLE TO: DIRECTOR OF FINANCE OF HOWARD COUNTY

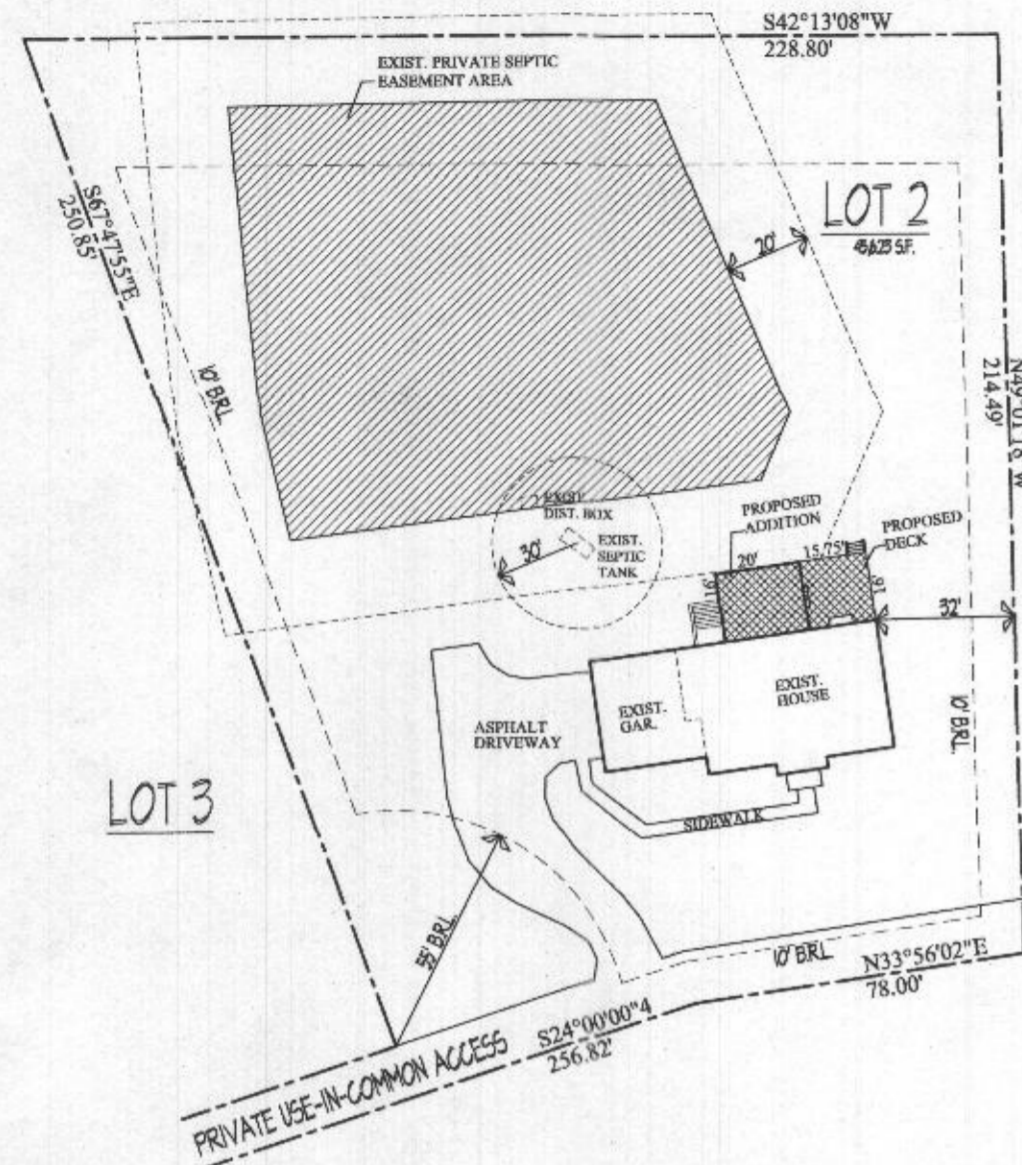
AGENCIES REQUIRED/APPROVALS: OK to approve.
 PR DPZ DED Health 3/8/22 SHA CID
 SUBMITTAL FEES: 200 PAYMENT: 1509 ACCEPTED BY: [Signature]



SITE PLAN

14393 DORSEY MILL ROAD
 GLENELG, MD 21738
 MAP 21 GRID 17 PARCEL 232
 HOWARD COUNTY
 ELECTION DISTRICT 04
 SCALE: 1"=30' DATE: MARCH 09, 2022

ZUCCO ADDITION



14393 DORSEY MILL ROAD
 GLENELG, MD 21738
 MAP 21 GRID 17 PARCEL 232
 HOWARD COUNTY
 ELECTION DISTRICT 04
 SCALE: 1"=30' DATE: MARCH 09, 2022

RESIDENTIAL BUILDING PERMIT INFORMATION

BUILDING SITE ADDRESS			
Street Address: 14393 Dorsey Mill Road		Unit:	
City: Glenelg		State: MD	
Subdivision/Village/Complex Name:		Zip Code: 21738	
Lot: 02	Tax Map: 0021	Parcel: 0232	Grading Permit #:
DESCRIPTION OF WORK			
Existing Use: Residential		Proposed Use: Residential	
Trade Work to Be Completed (Separate Permits Required):		Estimated Cost: \$ 125,000	
1) New 20'-0" wide x 16'-0" sunroom addition			
2) New 15'-9" wide x 16'-0" deck			
BUILDING CHARACTERISTICS			
Primary Structure: <input checked="" type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse <input type="checkbox"/> SF Duplex <input type="checkbox"/> Mobile Home <input type="checkbox"/> Multi-Family Dwelling (MF*)		Condo: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Utilities: <input checked="" type="checkbox"/> Electric <input checked="" type="checkbox"/> Gas		Water Supply: <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private (Well)	
Heating System: <input checked="" type="checkbox"/> Electric <input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane <input type="checkbox"/> Other:		Sewage Disposal: <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private (Septic)	
Sprinkler System: <input type="checkbox"/> NFPA 13 <input type="checkbox"/> NFPA 13R <input type="checkbox"/> NFPA 13D <input type="checkbox"/> None		Roadside Tree Project: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
ADDITIONAL RESIDENTIAL INFORMATION (PLEASE SELECT/COMPLETE ALL THAT APPLY)			
Model Name & Options: Zucco Addition			
# of Bedrooms (SF):	# of efficiency units (MF*):	# of 1 BR (MF*):	# of 2 BR (MF*):
# of Rooms: 1	# Full Baths:	# Half Baths:	# Fireplaces: 1
Garage/Carport Info: <input checked="" type="checkbox"/> Attached Garage <input type="checkbox"/> Detached Garage <input type="checkbox"/> Integral Garage <input type="checkbox"/> Carport <input type="checkbox"/> None			
Basement/Foundation Info: <input type="checkbox"/> Slab on Grade <input type="checkbox"/> Post & Pier <input checked="" type="checkbox"/> Unfinished Basement <input type="checkbox"/> Finished Basement: <input checked="" type="checkbox"/> Full or <input type="checkbox"/> Partial			
1st Fl Width: 20'	1st Fl Depth: 16'	2nd Fl Width:	2nd Fl Depth:
Energy Method: <input checked="" type="checkbox"/> Prescriptive <input type="checkbox"/> Performance <input type="checkbox"/> UA Alternative <input type="checkbox"/> ERI		Gross Area: 320 sq ft	Occupiable Area: 320 sq ft

TABLE R301.2 LIVE LOAD MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (IN POUNDS PER SQUARE FOOT) SHALL CONFORM TO THE FOLLOWING:

USE	LIVE LOAD	DEAD LOAD	TOTAL
ROOF TRUSSES	40	10 (top flanges)	50
RAFTERS	40	10	50
ATTICS WITHOUT STORAGE	10	5	15
ATTICS WITH LIMITED STORAGE	20	10	30
HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS	30	10	40
BALCONIES (EXTERIOR) AND DECKS	40	10	50
FIRE ESCAPES	40	10	50
GUARDRAILS AND HANDRAILS	200 ^h		
GUARDRAIL IN-FILL COMPONENTS	50 ^h		
PASSENGER VEHICLE GARAGES	50	50	100
ROOMS OTHER THAN SLEEPING ROOMS	40 ^g	10	50
SLEEPING ROOMS	30	10	40
STAIRS	40 ^f	20	60

ASSUMED SOIL BEARING CAPACITY: 2000 PSF

- Elevated garage floors shall be capable of supporting a 2,000-pound load applied over a 20-square-foot area.
- Unhabitable attics without storage are those where the maximum clear height between joists and rafters is less than 42 inches, or where there are not two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches high by 24 inches in width, or greater, within the plane of the trusses. This live load need not be assumed to act concurrently with any other live load requirements.
- Individual stair treads shall be designed for the uniformly distributed live load or a 300-pound concentrated load acting over an area of 4 square inches, whichever produces the greater stresses.
- A single concentrated load applied in any direction at any point along the top.
- See Section R502.2.2 for decks attached to exterior walls.
- Guard rail components (all those except the handrail, balusters and panel fillers) shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement.
- Unhabitable attics with limited storage are those where the maximum clear height between joists and rafters is 42 inches or greater, or where there are two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the trusses. The live load need only be applied to those portions of the joists or truss bottom chords where all of the following conditions are met:
 - The attic area is accessible from an opening not less than 20 inches in width by 30 inches in length that is located where the clear height in the attic is a minimum of 30 inches.
 - The slopes of the joists or truss bottom chords are no greater than 2 inches vertical to 12 units horizontal.
 - Required insulation depth is less than the joist or truss bottom chord member depth. The remaining portions of the joists or truss bottom chords shall be designed for a uniformly distributed concurrent live load of not less than 10 lb/ft².
- Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the load on the in-fill components. These loads shall be determined independent of one another, and loads are assumed not to occur with any other live load.

MANUAL J DESIGN CRITERIA

Elevation	Latitude	Winter Heating	Summer Cooling	Altitude Correction Factor	Indoor Design Temperature	Design Temperature Cooling	Heating Temperature Difference
148 ft	39	15° F	91° F	-	70° F	75° F	55° F
Cooling Temperature Difference	Wind Velocity Heating	Wind Velocity Cooling	Coincident Wet Bulb	Daily Range	Winter Humidity	Summer Humidity	-
16° F	15° F	7.5° F	74	M	30	50	-

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WATER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed (mph)	Topographic effects	Special wind region	Wind-borne debris zone		Weathering	Frost line depth	Termites					
40 lbs	115	NO	NO	NO	A	Severe	30"	Moderate Heavy	20° F	Yes	see flood maps	1500	55° F

DRAWING INDEX

TITLE	SHEET	TITLE	SHEET
COVER SHEET	CS	APA NARROW WALL DETAILS	A-8A
CONSTRUCTION NOTES	CN-1	WALL BRACING PLANS AND CHARTS	A-8B
STRUCTURAL NOTES	CN-2	WALL BRACING FLOOR PLANS	A-8C
EXISTING SIDE AND REAR ELEVATIONS	EX-1	SIMPLIFIED FOUNDATION PLAN	SP-1
EXISTING FOUNDATION PLAN	EX-2	SIMPLIFIED FLOOR PLANS	SP-2
EXISTING FIRST FLOOR PLAN	EX-3		
EXISTING SECOND FLOOR PLAN	EX-4		
SIDE AND REAR ELEVATIONS	A-1		
FOUNDATION PLAN	A-2		
FIRST FLOOR PLAN	A-3		
SECOND FLOOR PLAN	A-4		
SECTIONS A-C AND DETAILS	A-5		

ADOPTED CODES

- Effective until June 2022:
- 2018 International Building Code
 - 2018 International Residential Code
 - 2018 International Energy Conservation Code
 - 2018 International Mechanical Code
 - 2018 International Plumbing Code
 - 2018 NFPA 101 Life Safety Code
 - 2018 International Property Maintenance Code (Rental Housing)
 - 2017 Electrical Code with Local Amendments

ENERGY COMPLIANCE: PRESCRIPTIVE APPROACH SEE SHEET A-8A

SQ. FOOTAGE

BASEMENT	0
FIRST FLOOR	320
SECOND FLOOR	0
TOTAL	320
DECK	255

PERMIT SET
 March 09, 2022



JB HOME DESIGN, LLC

9416 CONCORD COURT
 BALTIMORE, MARYLAND 21234
 OFFICE (410) 599-9581
 FAX (410) 663-4069
 EMAIL: JON@JBHOMEDSIGN.COM

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home design

COVER SHEET

DATE:

SCALE: 1/4" = 1'-0"

CONTENTS:

SCALE: 1/4" = 1'-0"

PROJECT TITLE:

ZUCCO ADDITION

PROJECT TITLE:

ISSUE:

DATE:

SCALE: 1/4" = 1'-0"

PROJECT TITLE:

ZUCCO ADDITION

PROJECT TITLE:

CS

GENERAL

61. ALL NOTES APPLY TO EACH AND EVERY SUBCONTRACTOR. READ AND REVIEW EACH NOTE CAREFULLY FOR ITS APPLICABILITY TO THE WORK.

62. BUILDING CODE REFERENCES HEREUNDER AND ON THE PLANS REFER TO THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) AND OTHER INTERNATIONAL CODES, AS APPLICABLE, UNLESS OTHERWISE NOTED (UNO).

63. CONTRACTOR WILL PROVIDE THE GENERAL BUILDING PERMIT ONLY. EACH SUBCONTRACTOR SHALL SECURE ALL OTHER REQUIRED PERMITS PRIOR TO COMMENCING ANY WORK AND SHALL BE SOLELY RESPONSIBLE FOR OBTAINING AND PASSING, WITHOUT DELAY TO CONTRACTOR, ALL INSPECTIONS AND APPROVALS REQUIRED BY LHA OR ANY STORM WATER OR DUST CONTROL, REQUIREMENTS AND ANY INSPECTIONS AND APPROVALS REQUIRED BY CONTRACTOR OR ANY AGENT OF CONTRACTOR.

64. PERFORM ALL WORK IN COMPLIANCE WITH APPLICABLE LAWS, FREE FROM NONCONFORMANCE, IN A FIRST-CLASS, GOOD, AND WORKMANLIKE MANNER ACCORDING TO THE HIGHEST STANDARDS OF SUBCONTRACTORS TRADE AND IN STRICT CONFORMANCE WITH SUBCONTRACTORS OBLIGATIONS UNDER ITS AGREEMENT.

65. THE CONTRACT DOCUMENTS OUTLINE SALIENT MINIMUM REQUIREMENTS BUT DO NOT SPECIFY ALL LABOR, MATERIAL, TOOLS EQUIPMENT, UTILITIES, SERVICES AND OTHER ITEMS NECESSARY TO PROPERLY AND FULLY EXECUTE THE WORK.

66. WORK NOT SPECIFICALLY COVERED IN THE CONTRACT DOCUMENTS, BUT WHICH IS REASONABLY INFERRABLE FROM OR CUSTOMARILY PERFORMED BY ANY SUBCONTRACTOR OF THE SAME OR SIMILAR TRADE PERFORMING WORK OF THE TYPE SHOWN OR INCLUDED IN THE CONTRACT DOCUMENTS, INCLUDING DETAILS OR ITEMS OF THE WORK WHICH ARE NOT SPECIFICALLY COVERED OR IN THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND INSTALLED AT NO EXTRA COST.

67. ALL MATERIAL SUPPLIED SHALL BE NEW, THE BEST OF ITS KIND AND FROM THE SAME MANUFACTURER (AND SAME MANUFACTURING RUN WHERE APPLICABLE). ALL MATERIALS SHALL BE SUITABLE FOR THE USES INTENDED AND CONDITIONS ANTICIPATED. FURNISH HANDLE AND INSTALL MATERIAL IN ACCORDANCE WITH THE TERMS OF ITS LISTING OR APPROVAL. THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, GUIDELINES AND RECOMMENDATIONS AND APPLICABLE LAWS AND STANDARDS.

68. SUBCONTRACTOR SHALL PROTECT THE WORK, PROPERTY AND MATERIAL OF OTHER PERSONS BEFORE PROCEEDING WITH ANY WORK AND AT ALL TIMES DURING THE PERFORMANCE OF HIS WORK.

69. DRAWN DIMENSIONS TAKE PRECEDENCE OVER DRAIN INFORMATION - DO NOT SCALE DIMENSIONS. ALL DIMENSIONS ARE SHOWN TO FACE OF STUDS. ALL EXTERIOR STUD WALLS ARE 5 1/2" WIDE. ALL INTERIOR STUD WALLS ARE 3 1/2" WIDE (UNO).

70. SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE COMMENCING ANY WORK. BRING ALL ERRORS OR OMISSIONS TO THE IMMEDIATE ATTENTION OF CONTRACTOR BEFORE COMMENCING ANY WORK. SUBCONTRACTOR SHALL BEAR ALL COSTS AND EXPENSES FOR CORRECTING WORK COMMENCED WITHOUT VERIFYING DIMENSIONS OR WITHOUT HAVING A RESOLUTION TO ANY ERROR OR OMISSION.

71. REMOVE ALL WASTE MATERIAL AND TRASH DAILY. CLEAN THE WORK AREA DAILY. IMMEDIATELY AFTER COMPLETING WORK ON ANY HOME, REMOVE ALL TOOLS, EQUIPMENT AND EXCESS OR NONCONFORMING MATERIAL AND SHALL LEAVE THE HOME IN A BRIMMING CLEAN, NEAT, SAFE, SECURE AND SANITARY CONDITION.

SAFETY

72. EVERY SUBCONTRACTOR AND EACH OF ITS AGENTS SHALL COMPLY WITH ALL HEALTH, SAFETY AND ENVIRONMENTAL LAWS, RULES, REGULATIONS AND REQUIREMENTS EACH SUBCONTRACTOR UNDERSTANDS AND AGREES THAT SUBCONTRACTOR IS SOLELY LIABLE AND SOLELY RESPONSIBLE FOR THE HEALTH AND SAFETY OF ITS AGENTS AND THAT SUBCONTRACTOR POSSESSES THE AUTHORITY, EXPERTISE, CONTROL AND MEANS TO CARRY OUT SUCH RESPONSIBILITY.

73. CEILING HEIGHTS SHALL COMPLY WITH SECTION 905. WHERE FINISHED, CEILING HEIGHTS SHALL ALLOW FOR 1" MINIMUM FOR FINISHES TO COMPLY.

74. PROVIDE TEMPERED GLASS IN LOCATIONS DESIGNATED AS BEING HAZARDOUS UNDER SECTION R308.4 CONFORMING WITH THE REQUIREMENTS THEREIN.

75. PROVIDE A SOLID CORE WOOD DOOR NOT LESS THAN 1-3/8" THICKNESS BETWEEN THE GARAGE AND THE RESIDENCE (R302.5.1). PROVIDE AN AUTOMATIC DOOR CLOSER.

76. PROVIDE 5/8" TYPE "X" GYPSUM HALDBOARD FOR ALL WALLS AND CEILINGS SEPARATING THE GARAGE AND ANY HABITABLE OR USEABLE SPACE, INCLUDING ATTIC SPACE, AND THE STRUCTURE SUPPORTING THE SEPARATION (R302). DUCTWORK IN THE GARAGE OR PENETRATING ANY WALL OR CEILING BETWEEN THE GARAGE AND ANY HABITABLE OR USEABLE SPACE SHALL BE CONSTRUCTED OF NOT LESS THAN 26 GAUGE STEEL.

77. WINDOW WELLS SHALL BE OF GALVANIZED STEEL OR REINFORCED CONCRETE (UNO) AND BE OF SUFFICIENT STRENGTH TO RESIST BACKFILL PRESSURES AND SHALL HAVE MINIMUM HORIZONTAL AREA OF 4 SF. WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 3/8" (R301). PROVIDE A PERMANENTLY AFFIXED LADDER WHERE WINDOW DEPTH EXCEEDS 44". TOP OF WELL SHALL EXTEND NOT LESS THAN 3" ABOVE FINISHED GRADE AND BOTTOM OF WELL SHALL EXTEND NOT LESS THAN 4" BELOW WINDOW SILL. PROVIDE DRAINAGE BY CONNECTING TO THE BUILDING'S FOUNDATION DRAINAGE SYSTEM OR APPROVED ALTERNATIVE METHOD.

78. STAIRWAYS, RAMPS EXTERIOR EXIT BALCONIES, HALLWAYS AND DOORS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R301. STAIR TREADS AND RISERS SHALL HAVE MAXIMUM RISER HEIGHT OF 7 3/4" AND MINIMUM TREAD DEPTH OF 10". RISER HEIGHTS AND TREAD DEPTH SHALL NOT VARY MORE THAN 3/8". EACH EXTERIOR DOOR SHALL HAVE A FLOOR OR LANDING ON EACH SIDE. THE LANDING AT ANY EXTERIOR DOOR SHALL NOT BE MORE THAN 7 3/4" BELOW THE TOP OF THE DOOR THRESHOLD PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING.

79. PROVIDE AN INTERCONNECTED SMOKE DETECTOR SYSTEM, HAVING A SMOKE ALARM IN EACH SLEEPING ROOM, OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EACH ADJACENT STORY INCLUDING BASEMENTS (R301).

80. PROVIDE AN INTERCONNECTED CARBON MONOXIDE (CO) DETECTION SYSTEM, HAVING A CO ALARM WITHIN 10' OF THE ENTRANCE OF EVERY ROOM INTENDED TO BE LAWFULLY USED FOR SLEEPING PURPOSES, TYPICALLY IN A CENTRAL LOCATION SUCH AS A HALLWAY, AND ON EACH FLOOR LEVEL INTENDED TO BE LAWFULLY USED FOR PURPOSES, INCLUDING THE BASEMENT, THAT DOES NOT HAVE A ROOM INTENDED TO BE LAWFULLY USED FOR SLEEPING PURPOSES. CO ALARMS SHALL HAVE PERMANENT CO SENSOR OR REPLACEABLE CO SENSOR WITH END OF LIFE INDICATOR (R315).

81. PROVIDE A CRAML SPACE ACCESS OPENING AND PANEL NOT LESS THAN 18"x24" (R408). SEE SECTION M305.1.4 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPMENT IS LOCATED UNDER FLOORS.

82. PROVIDE A MINIMUM OF 3" BETWEEN ANY RECESSED LIGHT, FAN OR ANY OTHER HEAT PRODUCING OR EMANATING DEVICE AND COMBUSTIBLE INSULATION, UNLESS APPROPRIATELY LISTED FOR LESS CLEARANCE.

83. PROVIDE DRAFTSTOPPING AND FIRELOCKING PER THE MOST STRINGENT APPLICABLE REQUIREMENTS THEREUNDER THE IRC, THE INTERNATIONAL MECHANICAL CODE (IMC), THE INTERNATIONAL PLUMBING CODE (IPC), THE NATIONAL ELECTRICAL CODE (NEC) AND THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC). FIRELOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIRELOCKING SHALL BE SPECIFICALLY PROVIDED AT THE LOCATIONS DESIGNATED IN SECTION R302.1.

84. PROVIDE AN ATTIC ACCESS OPENING AND PANEL NOT LESS THAN 22" X 30" IN A READILY ACCESSIBLE LOCATION, PREFERABLY A SECONDARY BEDROOM (R801). PROVIDE NOT LESS THAN 30" OF UNOBSTRUCTED HEADROOM ABOVE THE OPENING. PROVIDE GASKET FOR ACCESS PANEL (IECC 402.2.4). REFER TO SECTIONS M305 AND M306 FOR MECHANICAL ACCESS AND CLEARANCE REQUIREMENTS.

CONCRETE AND MASONRY

C1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC AND THE IECC.

C2. REFER TO THE STRUCTURAL PLANS FOR STRUCTURAL CONCRETE AND MASONRY REQUIREMENTS.

C3. UNO. ON THE STRUCTURAL PLANS OR NOTES, THE MINIMUM SPECIFIED 28 DAY COMPRESSIVE STRENGTH FOR CONCRETE COMPONENTS EXPOSED TO MODERATE OR SEVERE WEATHERING POTENTIAL SHALL BE:

PORCHES, PATIOS, DRIVEWAYS, GARAGE FLOOR SLABS AND WALKWAYS EXPOSED TO THE WEATHER - 3500 PSI. BASEMENT WALLS, FOUNDATION WALLS AND OTHER WALLS EXPOSED TO THE WEATHER - 3000 PSI, AIR ENTRAINED 5 TO 7 PERCENT. BASEMENT SLABS AND INTERIOR SLABS ON GRADE, EXCEPT GARAGE FLOOR SLABS - 3000 PSI. REFER TO STRUCTURAL PLANS AND NOTES FOR STRUCTURAL CONCRETE REQUIREMENTS. (R402)

C4. SLOPE ALL EXTERIOR CONCRETE SURFACES NOT LESS THAN 1/8" AND NOT MORE THAN 1/4" PER FOOT AWAY FROM HOUSE. SLOPE GARAGE FLOORS APPROXIMATELY 4" REAR TO FRONT TO FACILITATE THE MOVEMENT OF LIQUIDS TOWARD THE MAIN VEHICLE ENTRY DOORWAY (R304.1).

C5. FOUNDATION WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R401 AND A318 AND SHALL EXTEND A MINIMUM OF 6" ABOVE GRADE AT ALL POINTS, 4" WHERE MASONRY VENEER IS USED.

C6. BASEMENT CONCRETE FLOORS SHALL BE PLACED OVER A MINIMUM 6-MIL POLYETHYLENE VAPOR RETARDER COMPLYING WITH ASTM E 1745, WITH JOINTS LAPPED NOT LESS THAN 12" OVER PREPARED 4" THICK BASE COURSE PER SECTION R602.

C7. CONCRETE FLOORS AND FOUNDATIONS SHALL BE MADE LEVEL WITHIN 1/2" IN 20' BUT NO MORE THAN 1" ACROSS THE FULL WIDTH OR LENGTH UNO, OR SPECIFICALLY DESIGNED FOR DRAINAGE.

C8. MASONRY AND STONE VENEER (INCLUDING MANUFACTURED) MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION 1051. THE MASONRY OR STONE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS, THE MASONRY OR STONE MANUFACTURER'S WRITTEN CODE EVALUATION/APPROVAL DOCUMENTS AND THE REQUIREMENTS SET FORTH BY THE BRICK INDUSTRY ASSOCIATION FOR BRICK.

C9. PROVIDE A MINIMUM 6" BY 4" BY 5/16" GALVANIZED STEEL ANGLE TO SUPPORT EXTERIOR MASONRY VENEERS UNO. ON THE STRUCTURAL PLANS (R103).

C10. ATTACH EXTERIOR MASONRY VENEER WITH GALVANIZED TIES, SPACED NOT MORE THAN 24" ON CENTER HORIZONTALLY AND VERTICALLY AND SHALL SUPPORT NO MORE THAN 2.61 SF OF WALL AREA (R103.1). PROVIDE FLASHING AND KEYPHOLES AS SHOWN IN FIGURE R103.7.

C11. MINIMUM SOIL CAPACITY IS ASSIGNED TO BE 2000 PSF AT ALL WALL AND PIER FOOTINGS. IT IS THE OWNER'S RESPONSIBILITY TO VERIFY BEARING CAPACITY AND TO NOTIFY THE DESIGNER IF THE CAPACITY IS LESS THAN 2000 PSF.

WOOD, METAL AND PLASTIC

M1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC AND THE IECC.

M2. WOOD MEMBERS AND PRODUCTS SHALL BE IDENTIFIED BY GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY.

M3. REFER TO THE STRUCTURAL PLANS FOR STRUCTURAL FRAMING AND SHEATHING REQUIREMENTS.

M4. FASTENERS AND CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL UNLESS OTHERWISE PERMITTED UNDER SECTION R301.3.

M5. DO NOT CUT, SPLICE, NOTCH, OR OTHERWISE ALTER ANY SAWN LUMBER IN EXCESS OF THE LIMITATIONS SET FORTH IN SECTIONS R502, R502 AND R502 WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

M6. DO NOT CUT, SPLICE, NOTCH, OR OTHERWISE ALTER ANY ENGINEERED WOOD PRODUCT OR TRUSS WITHOUT THE WRITTEN APPROVAL OF THE MANUFACTURER OR ENGINEER OF RECORD, UNLESS THE EFFECTS OF ANY SUCH PENETRATION IS CONSIDERED IN ITS DESIGN BY THE MANUFACTURER OR ENGINEER OF RECORD (R502 AND R502).

M7. ENDS OF EACH JOIST, SEAM, OR GIRDER SHALL BEAR NOT LESS THAN 1 1/2" ON WOOD OR METAL AND 3" ON CONCRETE (R502 AND R502).

M8. TRUSS SHOP DRAWINGS SHALL COMPLY WITH SECTIONS 502 AND 802 AND SHALL BE PROVIDED TO THE BUILDING OFFICIAL AND ENGINEER OF RECORD AND APPROVED BY BOTH PRIOR TO INSTALLATION. BRACE TRUSSES IN ACCORDANCE WITH TRUSS UNO. ON THE SHOP DRAWINGS. TRUSS TO WALL AND TRUSS TIE DOWN CONNECTIONS SHALL COMPLY WITH R502. ALL PERMANENT AND TEMPORARY BRACING LOCATIONS SHALL BE PREMARKED BY THE TRUSS MANUFACTURER.

M9. WHERE FOUNDATION CRIPPLE WALLS EXCEED 4' IN HEIGHT, FRAME SUCH WALLS WITH STUDS HAVING THE SIZE REQUIRED FOR AN ADDITIONAL STORY (R502).

M10. PROVIDE BACKING AND BLOCKING FOR RAILINGS AT STAIR OPENINGS AND ALONG WALLS WHERE RAILS MAY ATTACH, INCLUDING EXTERIOR RAILINGS FOR BATHROOM ACCESSORIES, SHOWER DOORS, CLOSET ITEMS, SHELVING, HARDWARE AND OTHER ACCESSORIES, AT OR ALONG CEILINGED PORCH AND PATIO SOFFITS AND CANTILEVERED FLOORS AND ELSEWHERE AS REQUIRED OR DIRECTED. PROVIDE 3" MINIMUM OF BACKING AROUND DOOR AND WINDOW OPENINGS. PROVIDE DRYWALL BACKING ALONG ALL TUBS AND TUB DECKS, SHOWER PANS, AND SHOWER SEATS AND ELSEWHERE AS REQUIRED OR DIRECTED.

M11. SHEATH AND SEAL THE UNDERSIDE OF ALL CANTILEVERED FLOOR AREAS WITH EXTERIOR EXPOSURE RATED SHEATHING. WHERE HOOD SIDING, SHEATHING OR FRAMING IS WITHIN 6" OF GRADE, EACH SHALL BE PROTECTED AGAINST DECAY (R511). INSULATE CANTILEVERED FLOOR AREAS BEFORE CLOSING IN OR PROVIDE OPENING SUFFICIENT TO INSULATE AFTER THE FACT.

M12. FLOORS SHALL BE MADE LEVEL WITHIN 1/4" IN 20' BUT NO MORE THAN 1/2" ACROSS THE FULL WIDTH OR LENGTH.

M13. WOOD, HARDBOARD, FIBER CEMENT AND VINYL SIDING MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION 1053 OR 1053.10 AS APPLICABLE, THE SIDING MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS, THE SIDING MANUFACTURER'S WRITTEN CODE EVALUATION/APPROVAL DOCUMENTS AND APPLICABLE RECOMMENDATIONS SET FORTH BY THE AMERICAN HARDBOARD ASSOCIATION OR THE VINYL SIDING INSTITUTE FOR HARDBOARD, PAINT AND/OR SEAL. ALL WOOD AND HARDBOARD EDGES.

M14. FINISH CARPENTRY, MILLWORK AND CABINETRY INSTALLATION SHALL COMPLY WITH THE MILLWORK MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND APPLICABLE ARCHITECTURAL.

THERMAL AND MOISTURE PROTECTION

T1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC, THE IECC, AND THE IMC.

T2. DURABLY SEAL THE BUILDING THERMAL ENVELOPE TO LEAK INFILTRATION SEAL ALL JOINTS, SEAMS, AND PENETRATIONS WITH DURABLE CAULKS, SEALANTS OR GASKETS, WEATHERSTRIPS, AIR BARRIERS, FILMS AND/ OR SELF-ADHESIVE FLASHING, EACH AS APPROPRIATE TO THE APPLICABLE CONDITION. THESE INCLUDE JOINTS, SEAMS AND PENETRATIONS THROUGH, BETWEEN, AROUND OR ALONG CONDITIONED AND UNCONDITIONED SPACES WITHIN THE HOUSE, INCLUDING, AT A MINIMUM, GARAGE AND CONDITIONED SPACE, TUBS AND SHOWERS, ATTIC AND CRAML SPACE ACCESSES, WINDOW AND POOR ASSEMBLIES, AND THEIR RESPECTIVE JAMBS AND FRAMING, RECESSED LIGHTS, PLUMBING, HVAC AND ELECTRICAL PENETRATIONS, CHANGES, DROPPED CEILING, KNEE WALLS, KNEEWARD, SILL PLATES, BLOCKINGS AND OTHER SOURCES OF INFILTRATION (N602.4 AND IECC 402). REFER TO THERMAL BY-PASS PLANS. VERIFY AIR SEALING THROUGH POST ROUGH-IN TEST OR THROUGH VISUAL INSPECTION (N602.4 AND IECC 402.4).

T3. A PERMANENT CERTIFICATE SHALL BE COMPLETED AND POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL. THIS CERTIFICATE SHOULD NOT COVER OR OBSTRUCT CIRCUIT DIRECTORY AND SHALL LIST THE PREDOMINANT INSULATION R-VALUES OF THE VARIOUS COMPONENTS INSTALLED IN THE HOME. THIS CERTIFICATE SHOULD ALSO LIST THE U-FACTORS AND SOLAR HEAT GAIN COEFFICIENT OF FENESTRATION (IECC 401).

T4. FURNISH AND INSTALL THE FOLLOWING MINIMUM INSULATION THERMAL RESISTANCE AS SET FORTH BELOW. INSTALL IN ACCORDANCE WITH THE INSULATION MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND THE RECOMMENDATIONS SET FORTH BY THE NORTH AMERICAN INSULATION MANUFACTURERS ASSOCIATION. A. R-20 2x6 EXTERIOR WALLS AND RM BOARDS B. R-44 ROOF AREAS C. R-14 CATHEDRAL ROOF AND BAY WINDOW CEILINGS D. R-14 CANTILEVERS AND FLOORS OF LIVING AREAS OVER UNHEATED SPACES E. R-10/15 BASEMENT AND CRAML SPACE WALLS F. R-10 FROST WALL AND WALKOUT (A MIN. OF 24" XPS) G. 0.25 MAXIMUM U-FACTOR, LOW-E WINDOWS

T5. FOR BASEMENT WALLS, WHEN OF CAST-IN-PLACE CONCRETE, THE APPLICATION OF ANY VAPOR RETARDER WITH OR OVER INSULATION SHALL BE DELAYED UNTIL THE WALL HAS CURED AND DRIED. VAPOR RETARDERS USED WITH INSULATION IN SUCH WALLS SHALL BE A CLASS III.

T6. INSULATE ALL SUPPLY DUCTS IN UNCONDITIONED SPACES WITH A MINIMUM R-8. INSULATE ALL OTHER DUCTS WITH A MINIMUM R-6. INSULATING DUCTS COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE IS NOT REQUIRED (IECC 405).

T7. ANY WATER OR WASTE PIPE INSTALLED IN AN EXTERIOR WALL, ATTIC, OR CRAML SPACE SHALL BE PROTECTED FROM FREEZING BY INSULATION OR HEAT OR BOTH (P2603). PIPE INSULATION IN ANY ATTIC OR CRAML SPACE SHALL BE PIPE INSULATION.

T8. BATHROOM, WATER CLOSET COMPARTMENTS, LAUNDRY ROOMS AND OTHER SIMILAR ROOMS NOT HAVING OPERABLE WINDOWS SHALL BE PROVIDED WITH A MECHANICAL FAN HAVING A VENTILATION RATE IN ACCORDANCE WITH MEET EXHAUST DIRECTLY TO THE OUTSIDE. REGULATING FANS ARE PROHIBITED. (R303)

T9. DAMP PROOF FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE HABITABLE SPACE AND CRAML SPACE WALLS, IN AREAS WHERE A HIGH WATER TABLE OR OTHER SEVERE SOIL-WATER CONDITIONS EXIST, ALL SUCH WALLS SHALL BE WATERPROOFED (R401). DAMPROOF ALL FOUNDATION WALLS THAT ENCLOSE ANY CRAML SPACES. REFER TO THE PROJECT SOILS REPORT FOR ADDITIONAL REQUIREMENTS.

T10. FULLY COVER THE GROUND SURFACE OF CRAML SPACES AND UNDER FLOOR SPACES WITH A 10-MIL MINIMUM CLASS I VAPOR RETARDER COMPLYING WITH ASTM E 1745, WITH JOINTS LAPPED NOT LESS THAN 12" AND SEALED (SHEATHING TAPE OR EQUAL) (R401). SEAL AROUND SUMP PITS, COLLINGS, PLUMBING AND OTHER PENETRATIONS. EXTEND UP THE WALL NOT LESS THAN 12" AND ATTACH CONTINUOUSLY.

T11. CRAML SPACES AND UNDER FLOOR AREAS SHALL BE SUPPLIED WITH A CONDITIONED AIR AND/ OR CONTINUOUS MECHANICAL VENTILATION AS SHOWN ON THE PLANS (R403.3). THE GROUND SURFACE SHALL BE COVERED AS NOTED UNDER T10 AND THE WALLS INSULATED AS NOTED UNDER T4.

T12. FULLY REMOVE AND/OR CLEAN ALL DEBRIS, WASTE, VEGETATION AND OTHER MATERIAL FROM BENEATH ANY AT GRADE BELOW GRADE FLOOR AREA OR CRAML SPACE (R403).

T13. PROVIDE WEATHER-RESISTANT SHEATHING PAPER BENEATH STUCCO, CULTURED STONE, SIDING AND MASONRY AS SET FORTH IN TABLE R103.4. SHEATHING PAPER SHALL BE SINGLE PLY ASPHALT-SATURATED URAFT GRADE D BREATHER TYPE PAPER, HAVING A 60 MINUTE WATER RESISTANCE RATING UNDER ASTM D 714. PROVIDE 2 LAYERS BEHIND STUCCO AND CULTURED STONE AND 1 LAYER BEHIND SIDING AND MASONRY. APPROVED HOUSEWRAP MAY BE SUBSTITUTED FOR 1 LAYER ONLY AND SHALL HAVE SHEATHING PAPER PLACED OVER IT WHEN UNDER STUCCO OR MANUFACTURED STONE.

T14. INSTALL EXTERIOR WINDOWS AND DOORS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, GUIDELINES AND RECOMMENDATIONS AND ASTM E 2102. PROVIDE PAN FLASHING FOR ALL EXTERIOR DOORS.

T15. PROVIDE DURABLE WEATHER STRIPPING FOR ALL EXTERIOR DOORS AND WINDOWS.

T16. PROVIDE FLASHING IN SUCH MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL ASSEMBLY, WALL CAVITY OR ROOF ASSEMBLY, AND PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. FLASH AND SEAL ALL EXTERIOR WINDOWS, DOORS, OPENINGS, PENETRATIONS AND JOINTS SO AS TO PREVENT WATER FROM PASSING THROUGH, BEYOND OR AROUND AND TO MAKE SUCH LEAKPROOF. PROVIDE MANUFACTURED FLASHINGS AT ALL PENETRATIONS. ALL MEMBRANES, BARRIERS, PAPERS, FELTS AND FLASHINGS SHALL BE LAPPED IN A SHEDDING MANNER. PROVIDE FLASHING AS SPECIFICALLY DETAILED IN SECTIONS R303, R303 AND R303.

T17. ROOF ASSEMBLIES SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN CHAPTER 9. ROOF COVERING MATERIALS AND INSTALLATION SHALL COMPLY WITH THE ROOFING MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, THE ROOF COVERING MANUFACTURER'S WRITTEN CODE EVALUATION/APPROVAL DOCUMENTS AND RECOMMENDATIONS AND THE REQUIREMENTS SET FORTH BY THE NATIONAL ROOFING CONTRACTORS ASSOCIATION, THE ASPHALT ROOFING MANUFACTURERS ASSOCIATION, AND THE ROOF TILE INSTITUTE FOR EACH APPLICABLE COVERING. UNDERLAYMENT SHALL COMPLY WITH SECTION 905 AND WHEN OF ASPHALT SATURATED OR SBS MODIFIED FELT SHALL BE REINFORCED POLYESTER OR FIBERGLASS.

T18. PROVIDE ROOF FLASHING PER SECTION R305 PER TYPE OF COVERING. FOR TILE ROOFS, ROOF VALLEY AND SIDEWALL FLASHINGS SHALL BE DOUBLE RAISED RIDGES. PROVIDE DRIP EDGES AT ROOF EAVES AND RAKES FOR ALL COMPOSITION ROOF COVERINGS AND WHERE REQUIRED OR RECOMMENDED FOR TILE ROOFS BY THE ROOF COVERING MANUFACTURER. PROVIDE KICK-OUT DIVERTER FLASHING AT ALL EAVE TO SIDE WALL JUNCTURES. FLASHING TO DIVERT WATER OFF THE FACE OF ANY SIDE WALL 4" MINIMUM.

T19. PROVIDE ATTIC VENTILATION PER SECTION R906 (CONFORM MANUFACTURER'S NET FREE AREA). SOFFIT, EAVE, AND CORNICE VENTS SHALL BE PROVIDED WITH A MANUFACTURED WEATHERPROOF INSULATION BARRIER (NONORGANIC) DESIGNED TO PROVIDE A MINIMUM OF 1" FREE SPACE BETWEEN INSULATION BARRIER AND UNDERSIDE OF SHEATHING.

T20. PROVIDE GUTTERS AND DOWN SPOTS AT ALL LOCATIONS NECESSARY TO PREVENT PRECIPITATE POOR OR LOCAL HEAVENING OF ROOFING AND TO EVENLY DISTRIBUTE AND DISCHARGE WATER AWAY FROM THE FOUNDATION. PROVIDE 5' DOWNPOUT EXTENSIONS AT ALL DISCHARGE POINTS UNLESS LIMITED BY PROPERTY BOUNDARIES, IN WHICH CASE NOT LESS THAN 4'.

T21. SEE TABLE R401.1 (SHEET A-88) FOR INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT.

FINISHES

F1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC.

F2. REFER TO THE STRUCTURAL PLANS FOR LOCATIONS WHERE GYPSUM BOARD MAY BE USED AS A STRUCTURAL COMPONENT OF ANY LATERAL FORCE RESISTING SYSTEM.

F3. GYPSUM BOARD MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION R022.3.1 ASTM C 450 AND THE GYPSUM ASSOCIATION'S GA-216 RECOMMENDED SPECIFICATION FOR THE APPLICATION AND FINISHING OF GYPSUM BOARD, EACH AS APPLICABLE. FINISH GYPSUM HALDBOARD TO LEVEL 3 FOR AREAS TO RECEIVE HEAVY OR KNOCK-DOWN TEXTURES AND LEVEL 4 FOR ALL OTHER AREAS PER GA-214. LEVELS OF GYPSUM BOARD FINISH IN ALL HABITABLE AREAS UNO.

F4. ALL TIE AND SHOWER AREAS ARE TO RECEIVE MOISTURE- AND MOLD-RESISTANT GYPSUM BACKER INTENDED FOR MOISTURE PRONE AREAS COMPLYING WITH ASTM C 650 AND D 3275. GYPSUM BOARD UTILIZED AS A BASE BACKER FOR ADHESIVE APPLICATION OF TILE OR OTHER NONABSORBENT FINISH MATERIAL SHALL ALSO CONFORM TO AIN C118 (R102.4.2). THOROUGHLY SEAL ALL PENETRATIONS.

F5. EXTERIOR SEALANTS SHALL COMPLY WITH ASTM C 920, TYPE S, GRADE N6, CLASS 25. SINGLE-COMPONENT, GOOD UV LIGHT RESISTANCE AND LONG-LIFE EXPECTANCY, NON-SHINK, AND PAINTABLE.

F6. PAINT MATERIAL AND APPLICATION SHALL COMPLY WITH THE PAINT MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS AND RECOMMENDATIONS AND THE RECOMMENDATIONS SET FORTH BY THE AMERICAN HARDBOARD ASSOCIATION, THE GYPSUM ASSOCIATION AND THE PAINTING AND DECORATING CONTRACTORS OF AMERICA.

F7. CARPET MATERIAL AND INSTALLATION SHALL COMPLY WITH THE CARPET MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND THE RECOMMENDATIONS SET FORTH BY THE CARPET AND RUG INSTITUTE, APPLICABLE.

F8. RESILIENT FLOOR MATERIAL AND INSTALLATION SHALL COMPLY WITH THE RESILIENT FLOOR COVERING MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND THE REQUIREMENTS SET FORTH BY THE RESILIENT FLOOR COVERING INSTITUTE.

F9. TILE MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION 102.4. THE TILE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND THE RECOMMENDATIONS SET FORTH BY THE CERAMIC TILE INSTITUTE OF AMERICA, THE TILE COUNCIL OF NORTH AMERICA, AND/OR THE MARBLE INSTITUTE OF AMERICA, FOR EACH APPLICABLE MATERIAL.

F10. STUCCO AND/OR PLASTER SYSTEMS MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION 103.6. THE STUCCO MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS, THE STUCCO MANUFACTURER'S WRITTEN CODE EVALUATION/APPROVAL DOCUMENTS AND THE RECOMMENDATIONS SET FORTH BY THE PORTLAND CEMENT ASSOCIATION, THE STUCCO MANUFACTURERS ASSOCIATION AND THE NORTHWEST WALL AND CEILING BUREAU.

MECHANICAL

M1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC, THE IMC, AND THE IFGC.

M2. ALL MATERIAL SHALL BE PROPERLY LISTED AND LABELED (M305). MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES. PROVIDE MAINTENANCE INSTRUCTIONS TO ALL MATERIAL AND SYSTEMS THAT REQUIRE PREVENTATIVE MAINTENANCE AND PLACE IN A CLEAR PLASTIC SLEEVE AFFIX TO THE APPLICABLE ITEM.

M3. PROVIDE LEVEL WORKING SPACE IN FRONT OF THE CONTROL SIDE OF ANY APPLIANCE OF NOT LESS THAN 30" IN WIDTH OR DEPTH. MAINTAIN MINIMUM WORKING SPACE OF 3" ON ALL SIDES, BACK AND TOP OF ANY APPLIANCE. APPLIANCES IN ATTICS AND IN CRAML SPACES OR UNDER FLOOR AREAS MUST MEET ADDITIONAL PASSAGEWAY AND CLEARANCE REQUIREMENTS (M305).

M4. APPLIANCES LOCATED IN ATTICS AND IN CRAML SPACES OR UNDER FLOOR AREAS SHALL BE PROVIDED WITH AN OPENING AND A CLEAR AND UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE BUT NOT LESS THAN 30" HIGH AND 22" WIDE WITH 24" WIDE CONTINUOUS SOLID FLOORING RAISED SUCH THAT PREVENTS DAMAGING OR COMPRESSING INSULATION AND/OR LEVEL GRADE FOR NOT MORE THAN 20" IN LENGTH. PROVIDE RAISED SOLID FLOORING AND/OR LEVEL SERVICE SPACE OF NOT LESS THAN 30" IN WIDTH OR DEPTH ALONG ALL SIDES WHERE ACCESS IS REQUIRED (M305, N1023.2.3 AND IECC 402.2.3).

M5. EQUIPMENT AND APPLIANCES HAVING AN IGNITION SOURCE SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 18" ABOVE THE FLOOR IN HAZARDOUS LOCATIONS AND GARAGES. (M307, G2404 AND G2408). ELEVATION OF THE IGNITION SOURCE IS NOT REQUIRED FOR APPLIANCES LISTED AS FLAMMABLE VAPOR RESISTANT AND FOR INSTALLATION WITHOUT ELEVATION.

M6. UNLESS OTHERWISE PREDETERMINED ON ANY MECHANICAL PLAN, SUBCONTRACTOR SHALL SIZE ALL HEATING AND COOLING EQUIPMENT IN ACCORDANCE WITH ACCA MANUAL 5 BASED ON BUILDING LOADS CALCULATED IN ACCORDANCE WITH ACCA MANUAL J OR THE ASHRAE HANDBOOK OF FUNDAMENTALS (M401 AND IECC 403).

M7. UNLESS OTHERWISE PREDETERMINED ON ANY MECHANICAL PLAN, SUBCONTRACTOR SHALL SIZE, FABRICATE, AND LAUNCH DUCT SYSTEMS IN ACCORDANCE WITH ACCA MANUAL D AND FABRICATE IN ACCORDANCE WITH CHAPTER 16 AND THE INTERNATIONAL MECHANICAL CODE. UNDER NO CIRCUMSTANCE SHALL STUD WALL CAVITIES OR SPACES AND JOIST SPACE PLUMBING BE USED FOR SUPPLY OR RETURN AIR.

M8. SEAL ALL FIELD-MADE DUCT JOINTS, SEAMS, FLANGES, CONNECTIONS, AND THE LIKE WITH WELDS, GASKETS, OR MASTICS ONLY. SEAL ALL FACTORY-MADE DUCT IN ACCORDANCE WITH DUCT MANUFACTURER'S RECOMMENDATIONS. VERIFY DUCT TIGHTNESS WITH POST-CONSTRUCTION OR ROUGH-IN TEST. (M601, N103.2, AND IECC 403.2).

M9. PROVIDE ROOF FLASHING PER SECTION R305 PER TYPE OF COVERING. FOR TILE ROOFS, ROOF VALLEY AND SIDEWALL FLASHING SHALL BE DOUBLE RAISED RIDGES. PROVIDE DRIP EDGES AT ROOF EAVES AND RAKES FOR ALL COMPOSITION ROOF COVERINGS AND WHERE REQUIRED OR RECOMMENDED FOR TILE ROOFS BY THE ROOF COVERING MANUFACTURER. PROVIDE KICK-OUT DIVERTER FLASHING AT ALL EAVE TO SIDE WALL JUNCTURES. FLASHING TO DIVERT WATER OFF THE FACE OF ANY SIDE WALL 4" MINIMUM.

M10. GAS-FIRED APPLIANCES SHALL RECEIVE COMBUSTION AIR AND SHALL BE VENTED IN ACCORDANCE WITH CHAPTER 24. COMBUSTION AIR OPENINGS SHALL BE UNOBSTRUCTED FOR NOT LESS THAN 6" (M402), OR IN ACCORDANCE WITH CITY AMENDMENTS.

M11. CLOTHES DRYER EXHAUST DUCTS SHALL NOT EXCEED 25' IN LENGTH, WITH REDUCTIONS IN LENGTH AS SET FORTH IN SECTIONS M502 AND G2425, AND SHALL TERMINATE ON THE OUTSIDE WITH BACKDRAFT DAMPER. DO NOT VENT VERTICALLY THROUGH THE ATTIC SPACE OR ROOF. DO NOT CONNECT EXHAUST DUCTS WITH SCREWS OR OTHER FASTENERS WHICH EXTEND INTO THE DUCT.

M12. PROVIDE COMBUSTION, VENTILATION, AND DILUTION AIR IN ACCORDANCE WITH SECTION G2407.

M13. FUEL GAS PIPING IS PROHIBITED FROM BEING INSTALLED BENEATH ANY HOME OR THROUGH OR BENEATH ANY FOUNDATION UNLESS ENCASED IN A PROTECTIVE SLEEVE DESIGNED TO WITHSTAND THE LOADS (G2415).

M14. WHERE VENTS PASS THROUGH INSULATED ASSEMBLIES, PROVIDE AN INSULATION SHIELD OF NOT LESS THAN 20 GAUGE SHEET METAL FOR CLEARANCE AS SPECIFIED BY VENT MANUFACTURER. TERMINATE SHEET AT LEAST 2" ABOVE INSULATION AND SECURE (G2426).

M15. UNINSULATED SINGLE-WALL METAL PIPE SHALL NOT BE USED FOR VENTING GAS APPLIANCES (G2421).

PLUMBING

P1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC, THE IMC, AND THE IFGC.

P2. TEST PIPING AND PLUMBING FOR POTENTIAL LEAKAGE IN ACCORDANCE WITH SECTIONS G2417 AND P2503, AND IN ACCORDANCE WITH CITY AMENDMENTS.

P3. PROTECT PIPING WITH SHIELD PLATES WHERE PIPING IS LESS THAN 15" FROM THE NEAREST EDGE OF ANY WOOD MEMBER (P2603).

P4. PIPING PASSING THROUGH OR UNDER FOOTINGS OR FOUNDATION WALLS SHALL BE PROVIDED WITH A RELIEVING ARCH OR PROVIDE A PIPE SLEEVE BUILT IN THE FOUNDATION WALL 2 PIPE SIZES GREATER THAN THE PIPE PASSING THROUGH THE WALL (P2603). FULLY AND PERMANENTLY SEAL ANY PENETRATIONS THROUGH THE FOUNDATION WALL.

P5. PROVIDE ADEQUATE VALVES AND DEVICES, TO INCLUDE SERVICE, RELIEF, CHECK, PRESSURE-REDUCING, BACKFLOW PREVENTION, THERMAL AND FLOW CONTROL, TRAPPING, ETC., AS REQUIRED OR OTHERWISE REQUIRED OR RECOMMENDED.

P6. THE WATER SERVICE AND WATER DISTRIBUTION SYSTEMS SHALL BE DESIGNED AND PIPE SIZES SHALL BE SELECTED SUCH THAT UNDER CONDITIONS OF PEAK DEMAND, THE CAPACITIES AT THE POINT OF OUTLET DISCHARGE SHALL NOT BE LESS THAN SHOWN IN TABLE P2403.1.

P7. WATER SERVICE MAINS, BRANCH MAINS AND RISERS SHALL BE DETERMINED ACCORDING TO WATER SUPPLY DEMAND, AVAILABLE WATER PRESSURE AND FRICTION LOSS DUE TO THE WATER METER AND DEVELOPED LENGTH OF PIPE, INCLUDING EQUIVALENT LENGTH OF FITTINGS (P2502).

P8. THE MAXIMUM LENGTH OF INDIVIDUAL DISTRIBUTION LINES SHALL BE 60' (P2503).

P9. WATER SERVICE PIPING IS PROHIBITED IN CONTAMINATED OR CORROSIVE SOILS WITHOUT USE OF APPROVED ALTERNATE MATERIALS OR METHODS (P2403). SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURING WRITTEN APPROVAL FROM THE BUILDING OFFICIAL AS TO ACCEPTABILITY OF MATERIAL

STRUCTURAL STEEL

STRUCTURAL STEEL BEAMS SHALL CONFORM TO ASTM A572 GRADE 50 (50 ksi). STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500, GRADE B. STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B, AND ALL OTHER STRUCTURAL STEEL, INCLUDING PLATES AND MISCELLANEOUS SHAPES SHALL CONFORM TO ASTM 36, 36 KSI.

ALL SURFACES (INSIDE AND OUTSIDE) OF STEEL COLUMN SHALL BE SHOP COATED WITH RUST-INHIBITIVE PAINT.

BOLTS FOR CONNECTING STRUCTURAL STEEL SHAPES SHALL BE ASTM A325-N 3/4" DIA. UNO. ON THE DRAWINGS OR IN THE PROJECT SPECIFICATIONS.

ANCHOR BOLTS SHALL CONFORM TO ASTM A307.

FABRICATION AND ERECTION OF ALL STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE LATEST SPECIFICATION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

PROVIDE WELDED CONNECTIONS TYPICALLY UNLESS OTHERWISE NOTED. WELDING ELECTRODES SHALL BE E70 SERIES.

WELDS SHALL BE MADE ONLY BY WELDERS WHO HAVE BEEN PREQUALIFIED BY TESTS OF THE AMERICAN WELDING SOCIETY PRESCRIBED IN THE STRUCTURAL WELDING CODE, AWS D1.1 (LATEST EDITION).

ANY CONNECTION NOT SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS SHALL BE DESIGNED AND DETAILED BY THE STRUCTURAL STEEL FABRICATOR. SEE THE TYPICAL BEAM CONNECTION DETAILS ON THE DRAWINGS.

MILL BOTTOM OF ALL COLUMN AND FINISH TOP OF ALL BASE PLATES IN ACCORDANCE WITH AISC, SPECIFICATIONS. BASE PLATES SHALL BE WELDED TO BOTTOM OF COLUMN.

CONNECTIONS SHALL BE AISC STANDARD.

WOOD FRAMING

ALL FRAMING SHALL BE CAPABLE OF CARRYING ALL LOADS AS SPECIFIED BY THE CODE (SECTION R602) AND TRANSMITTING THE RESULTING LOADS TO THE SUPPORT STRUCTURE PER SECTIONS R602.2, R602.1, AND R602.2.

ALL INTERIOR NON-LOAD BEARING WALLS SHALL BE 2X4 STUDS AT 24" O.C. (MIN) WITH A SINGLE TOP PLATE.

ALL EXTERIOR AND INTERIOR LOAD BEARING WALLS SHALL BE STUDS AT 24" O.C. (UNO) AND SHEATHED WITH 1/2" OSB (EXTERIOR) AND 1/2" GYPSUM SHEATHING (INTERIOR). BLOCKING OF HORIZONTAL PANEL FACES IS NOT REQUIRED EXCEPT AT SHEAR WALLS OR BRACED WALL SEGMENTS. NAIL IN ACCORDANCE WITH THE PERTAINING FASTENING SCHEDULE.

ALL STUDS AND TOP PLATES ARE NOT TO BE DRILLED IN EXCESS OF CODE. (SECTIONS R602.6 AND R602.7)

ALL POSTS AND MULTIPLE STUDS SHALL BE RUN CONTINUOUSLY TO SOLID BEARING ON FOUNDATION WALL OR BEAMS PROVIDE SOLID BLOCKING AT FLOORS.

STUDS AND FLOOR FRAMING (JOISTS OR FLOOR TRUSSES) SHALL ALIGN AT CANTILEVERS, ABOVE AND BELOW THE FLOOR FRAMING. COLUMN SHALL BE ADEQUATELY ANCHORED TO PREVENT INTERNAL DISPLACEMENT.

WOOD CONNECTIONS SHALL BE IN ACCORDANCE WITH PARTIAL FASTENING SCHEDULE. PROVIDE BRIDGING AT EACH END OF THE JOIST, AND ONE ROW OF SOLID BRIDGING BELOW ALL INTERIOR BEARING PARTITIONS.

FASTENERS, JOIST HANGERS, HURRICANE ANCHORS, POST BASES AND OTHER FRAMING ANCHORS ARE TO BE AS MANUFACTURED BY SIMPSON STRONG-TIE (U.S.P.) OR EQUAL, AND ARE TO BE USED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN SPECIFICATIONS. ALL FASTENERS TO BE 1/2" DIA. UNLESS OTHERWISE NOTED. PROVIDE GALV. FINISH UNLESS OTHERWISE NOTED. JOIST HANGERS SHALL BE MIN. 1/2" DIA. UNLESS OTHERWISE NOTED. PROVIDE GALV. FINISH UNLESS OTHERWISE NOTED. JOIST HANGERS FOR ALL FLUSH FRAMED JOISTS. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE 2-MAX. COATED, UNO.

THE NUMBER OF WALL STUDS AT BEARING POINTS OF 2X4 MEMBER BEAMS SHALL EXCEED THE NUMBER OF MEMBERS IN THE BEAM BY ONE. THE CENTERLINE OF THE BEAM SHALL BE THE CENTERLINE OF THE SUPPORTING WALL STUDS, UNLESS NOTED OTHERWISE ON PLAN. ALL ENGINEERED LUMBER BEAMS SHALL HAVE 3 STUDS (MIN) AND EXCEED WIDTH OF BEAM. CONTINUE THESE STUDS TO THE PARTIAL FOUNDATION WITH INTERMEDIATE SUPPORTS THROUGH FLOOR, BETWEEN LOWER WALL, TOP PLATE AND UPPER WALL, BOTTOM PLATE.

ALL EXTERIOR POSTS TO BE TREATED 6x6, UNO. (NOT) TOP OF POST FOR BEAM BRG. (3" MAX) AND THRU BOLT BEAM TO POST WITH (2) 1/2" DIA. GALV. BOLTS. ALTERNATE, PROVIDE COLUMN CAP CONNECTION WITH 4x4 SERIES BY SIMPSON STRONG-TIE OR EQ. PROVIDE SOLID BLOCKING BELOW ALL COLUMNS, TO TRANSFER LOAD DIRECTLY TO FRAMING/PARTIAL FOUNDATION BELOW.

PROVIDE DOUBLE JOIST UNDER ALL PARTITIONS PARALLEL TO JOIST SPAN AND AROUND ALL FLOOR AND ROOF OPENINGS. SPACE AND BLOCK IF PARTITIONS ABOVE IS A PLUMBING WALL. PROVIDE SOLID BLOCKING AT 12" O.C. BETWEEN JOISTS UNDER PARTITIONS ABOVE WHICH ARE PARALLEL TO THE JOISTS BUT NOT DIRECTLY OVER THE JOISTS. BLOCKING SHALL BE MIN 2" IN THICKNESS AND SHALL MATCH THE DEPTH OF THE JOISTS.

NO STRUCTURAL MEMBER SHALL BE OMITTED, NOTCHED, CUT, BLOCKED OUT OR RELOCATED WITHOUT PRIOR APPROVAL BY THE DESIGNER OR STRUCTURAL ENGINEER. DO NOT ALTER SIZES OF MEMBERS NOTED WITHOUT APPROVAL OF BOTH.

CUTTING OF WOOD BEAMS, JOISTS AND RAFTERS SHALL BE LIMITED TO CUTS AND BORED HOLES NOT DEEPER THAN ONE-SIXTH THE MEMBER DEPTH AND SHALL NOT BE LOCATED WITHIN THE MIDDLE THIRD OF THE SPAN. NOTCHES LOCATED CLOSER TO SUPPORTS THAN THREE TIMES THE MEMBER DEPTH SHALL NOT EXCEED ONE-FIFTH THE DEPTH. HOLES BORED OR CUT INTO JOISTS SHALL BE MIN. 2" CLEAR FROM THE TOP OR BOTTOM OF THE JOIST AND THE HOLE DIAMETER SHALL NOT EXCEED ONE-THIRD OF THE JOIST DEPTH.

FOR DIMENSIONAL LUMBER FRAMING, THERE SHALL NOT BE LESS THAN ONE LINE OF BRIDGING IN EVERY EIGHT FEET OF SPAN IN FLOOR, ATTIC AND ROOF FRAMING. THE BRIDGING SHALL CONSIST OF NOT LESS THAN ONE BY THREE INCH LUMBER DOUBLE NAILED AT EACH END OR OF EQUIVALENT METAL BRACING OF EQUAL RIGIDITY. MIDSPAN BRIDGING IS NOT REQUIRED FOR FLOOR, ATTIC OR ROOF FRAMING WHERE JOIST DEPTH DOES NOT EXCEED TWELVE INCHES NOMINAL. BLOCK ALL STD WALLS AT MAXIMUM INTERVALS OF EIGHT FEET WITH A MINIMUM OF TWO-BY FOUR SOLID MATERIAL WITH TIGHT JOISTS.

ALL JOISTS AND GIRDERS MUST HAVE A MINIMUM BEARING OF 1/2" (WOOD OR STEEL) AND 3" (MASONRY OR CONCRETE) AND 3" (LAPPED JOISTS)

PROVIDE DRAFTSTOPPING AND FIREBLOCKING IN ACCORDANCE WITH SECTIONS R602.2 AND R602.1 (RESPECTIVELY)

ALL CEILING JOISTS SHOULD ATTACHED TO RAFTERS WITH (5) 10d NAILS

ALL MULTIPLE BEAMS SHALL BE NAILED WITH 3 ROWS OF 10d NAILS AT 8" O.C. STAGGERED OR BOLTED WITH 1/2" DIA. BOLTS AT 16" O.C. STAGGERED (UNO).

BALLOON FRAME ALL END WALLS WITH CATHEDRAL CEILING (UNO)

FASTEN GABLE-END STUDS TO CEILING DIAPHRAM BY FASTENING NAILER TO EACH STUD AND BY FASTENING CEILING TO NAILER WITH 8d NAILS AT 8" O.C.

WHERE DECKS FASTEN TO HOISE FRAMING, PROVIDE CONTINUOUS TREATED LEDGER THRU-BOLTED TO FLOOR STRUCTURE WITH (2) 1/2" DIA. BOLTS AT 16" O.C. PROVIDE HOT-DIPPED GALV. 1ST. HANGER TO LEDGER.

ALL FLUSH FRAMED ENGINEERED LUMBER BEAM CONNECTIONS TO BE FASTENED WITH BEAM HANGERS AS DESIGNED AND PROVIDED BY ENGINEERED LUMBER MANUFACTURER (UNO).

ROOF AND FLOOR FRAMING LAYOUTS ARE PROVIDED TO ILLUSTRATE CONDITIONS OF CONSTRUCTION AND NOT NECESSARILY INDICATE SPECIFIC QUANTITIES OF MATERIALS OR COMPONENTS REQUIRED FOR CONSTRUCTION.

CONSTRUCTION BRACING SHALL BE PROVIDED BY THE TRADE SUB-CONTRACTOR TO MAINTAIN THE BUILDING PLUMB AND TRUE. THIS BRACING SHALL REMAIN UNTIL THE SPECIFIED SHEARWALLS ARE TOTALLY INSTALLED.

FRAME CHIMNEYS, FRAME CHIMNEYS SHALL BE CONSTRUCTED OF MINIMUM #2 SFF STUDS, MAXIMUM 16" O.C. USE 2 X 4 IF CHIMNEY EXTENDS LESS THAN 8' ABOVE ROOF, OTHERWISE USE 2 X 6 SHEATH WITH 1/2" APA RATED SHEATHING CONTINUOUS ACROSS PLATES AND JOISTS, GLUE AND NAIL WITH 8d NAILS @ 8" O.C. SECURE TO ROOF. STUDS MUST BE CONTINUOUS ACROSS ROOF INTERSECTION.

PROVIDE DEFORMED SHANK NAILS AS REQD. BY U.L. RATINGS.

WOOD TRUSSES

TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THESE SPECIFICATIONS AND WHERE ANY APPLICABLE DESIGN FEATURE IS NOT SPECIFIED HEREIN, DESIGN SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF LATEST EDITION OF NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS) AMERICAN FOREST AND PAPER ASSOCIATION (AFPA), AND DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES (ANSP/T) TRUSS PLATE INSTITUTE (TRI), AND CODES OF JURISDICTION. FABRICATE, SUPPLY AND ERECT WOOD TRUSSES AS SHOWN ON THE DRAWINGS AND AS SPECIFIED. WORK SHALL INCLUDE ALL ANCHORAGE, BLOCKING, CURING, MISCELLANEOUS FRAMING AND BRACING.

LUMBER USED FOR TRUSS MEMBERS SHALL BE IDENTIFIED BY GRADE MARK OF A LUMBER INSPECTION AGENCY, AND SHALL BE AS SHOWN ON DESIGN DRAWINGS. TRUSSES SHALL BE HANDLED DURING FABRICATION, DELIVERY AND AT JOBSITE SO AS NOT TO BE SUBJECTED TO EXCESSIVE BENDING. TRUSSES SHALL BE UNLOADED ON SMOOTH GROUND TO AVOID LATERAL STRAIN. TRUSSES SHALL BE PROTECTED FROM DAMAGE THAT MIGHT RESULT FROM ON-SITE ACTIVITIES AND ENVIRONMENTAL CONDITIONS. PREVENT TOPPLING WHEN BANDING IS REMOVED.

HANDLE DURING INSTALLATION IN ACCORDANCE WITH HANDLING, INSTALLING AND BRACING WOOD TRUSSES (HIS-41), TRI, AND ANSP/T H-PS. INSTALLATION SHALL BE CONSISTENT WITH GOOD WORKMANSHIP AND GOOD BUILDING PRACTICES. TRUSSES SHALL BE SET AND SECURED LEVEL AND PLUMB, AND IN CORRECT LOCATION. TRUSSES SHALL BE HELD IN CORRECT ALIGNMENT UNTIL SPECIFIED PERMANENT BRACING IS INSTALLED. CUTTING AND ALTERING OF TRUSSES IS NOT PERMITTED. CONCENTRATED LOADS (FULL BUNDLES OF DECKING) SHALL NOT BE PLACED ATOP TRUSSES UNTIL ALL SPECIFIED BRACING HAS BEEN INSTALLED AND DECKING IS PERMANENTLY NAILED IN PLACE. BRACING IS ALWAYS REQUIRED. THE TRADE SUB-CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FURNISHING THE MATERIALS USED FOR INSTALLATION AND PERMANENT BRACING.

ALL TRUSSES MUST BE DESIGNED FOR UPLIFT LOADS. UPLIFT VALUES AT EACH TRUSS BEARING POINT MUST BE SHOWN ON TRUSS ENGINEERING SHEET.

ALL ROOF TRUSSES SHALL BE ATTACHED TO PERPENDICULAR NON-LOAD BEARING WALLS WITH TRUSS CLIPS. CEILING GNB SHALL BE ATTACHED TO BLOCKING ON THE WALL AND NOT TO THE TRUSS FOR A DISTANCE OF 18" FROM THE WALL.

ALL FLOOR TRUSSES ON THE LOWEST FLOOR MUST BE ATTACHED TO PERPENDICULAR NON-LOAD BEARING WALLS WITH TRUSS CLIPS. CEILING GNB SHALL BE ATTACHED TO BLOCKING ON THE WALL AND NOT TO THE TRUSS FOR A DISTANCE OF 18" FROM THE WALL.

LIVE LOAD DEFLECTION SHALL NOT EXCEED 1/2" OR L/460 FOR FLOOR TRUSSES AND 1/2" OR L/640 FOR ROOF TRUSSES.

THE MANUFACTURER SHALL SUPPLY ALL REQUIRED HANGERS, HOLD-DOWN CLIPS, AND OTHER SPECIAL HARDWARE.

MASONRY

ALL MASONRY WORK SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF BIA AND NCSA SPECIFICATIONS FOR MASONRY STRUCTURE (ACI 530.1) PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE.

HOLLOW CMU NORMAL WEIGHT: ASTM C90, GRADE N, F_m=1500 psi
FACE BRICK ASTM C216, SEVERE WEATHER BRICK, TYPE FEX, F_m=2000 psi
STONE VENEER OWNER APPROVED
MORTAR PORTLAND CEMENT PROJECTION SPECIFICATION MORTARS SHALL CONSIST OF TYPE I PORTLAND CEMENT, TYPE II HYDRATED LIME AND APPROVED AGGREGATE, w/c 0.50 MAX. MIN. AVERAGE COMPRESSIVE STRENGTH OF 2" CUBES AT 28 DAYS

ANCHORED VENEER WALLS TO HAVE NON-CORROSIVE METAL TIES AT 16" O.C. VERTICALLY AND HORIZONTALLY AND EMBEDDED IN MORTAR A MINIMUM 1/2" WITH AT LEAST 5/8" COVER (OUTSIDE FACE). VENEER TIES SHALL BE NO. 22 U.S. GAGE X 1/8" CORRUGATED SHEET METAL OR NO. 4 U.S. GAGE WIRE WITH A HOOK.

ADDERED MASONRY VENEER SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS ON WATER RESISTANT BARRIER.

PROVIDE NEEP HOLES AT 24" O.C. AT BASE FLASHING.

ASB STEEL LINTEL SIZES FOR OPENINGS PER 4" THICKNESS OF MASONRY WALL AS FOLLOWS: 4'-0" SPAN OR LESS 1 1/2" X 3" 1/2" X 5/8" 7'-4" SPAN OR LESS 1 1/2" X 3" 1/2" X 5/8" 5'-6" SPAN OR LESS 1 1/2" X 3" 1/2" X 5/8" 4'-0" SPAN OR LESS 1 1/2" X 3" 1/2" X 5/8"

PROVIDE MIN. 8" BEARING EACH END AND BRICK TIES, 16" O.C. AT 1st COURSE ABOVE LINTEL. LINTEL SHALL BE SHOP COATED WITH A RUST-INHIBITIVE PAINT.

MASONRY CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION.

PARTIAL FOUNDATION

PRIOR TO THE START OF ANY CONSTRUCTION, ALL VEGETATION, TOPSOIL, ORGANIC SOILS, SOILS MIXED WITH EXCESSIVE AMOUNTS OF ROOTS, STUMPS, ASPHALT OR OTHER DELETERIOUS MATERIALS SUCH AS BUILDING DEBRIS, EXISTING UTILITY LINES AND BACKFILL SHALL BE REMOVED FROM ALL BUILDING AND PAVEMENT AREAS INCLUDING AT LEAST 5 FT. OFFSETS OUTSIDE ALL BUILDING AND PAVEMENT LINES. SOFT, VERY MOIST AND LOOSE SOIL SHALL ALSO BE REMOVED FROM BUILDING AREAS. THE CLEARED AREAS SHALL ALSO BE PROOF ROLLED PRIOR TO THE PLACEMENT OF FILL. IF PUMPING OR RUTTING IS OBSERVED, THE SOFT OR MOIST MATERIAL SHALL BE REMOVED DOWN TO FIRM SUBGRADE AND REPLACED WITH SUITABLE FILL. ANY POTENTIALLY EXPANSIVE CLAY (CL-CI) SOILS BELOW FOOTINGS AND FOR AT LEAST 2 FEET BELOW SLABS AND PAVEMENTS SHALL BE REMOVED AND REPLACED WITH SUITABLE FILL MATERIALS.

TRADE SUB-CONTRACTOR IS TO PROVIDE A DE-WATERING SYSTEM (IF REQUIRED) TO PREVENT SOFTENING OF SUBGRADE, FACILITATE CONTROL OF GROUND WATER AND ALLOW CONSTRUCTION TO PROCEED IN DRY CONDITIONS. NO EXCAVATION SHALL EXTEND CLOSER THAN 2 FT. TO GROUNDWATER LEVEL. IF THE SOIL AT THE SUBGRADE BECOMES MET, THEN CONSTRUCTION SHOULD STOP AND DE-WATERING MUST BE PERFORMED TO LOWER THE WATER LEVEL. RESUME EXCAVATION ONLY AFTER THE GEOTECHNICAL ENGINEER HAS EXAMINED THE CONDITION AND HAS APPROVED THE RESUMPTION OF ANY EXCAVATION WORKS.

SOILS, FOOTINGS, PARTIAL FOUNDATION WALLS AND SLABS SHALL NOT BE PLACED ON OR IN MARINE CLAY, PEAT OR OTHER ORGANIC MATERIALS. PLACE FOOTINGS ON FIRM, DRY, NON-FROZEN SUBGRADE. REMOVE SOFT SOILS ENCOUNTERED DURING EXCAVATION. BACKFILL EXCAVATIONS AND AREAS REQUIRING STRUCTURAL FILL WITH CLEAN, MOIST, GRANULAR SELECT BORROW (TYPE 1) GRADE V OR BETTER IN ACCORDANCE WITH DELDOT STD. SPECS). ALL BACKFILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8-INCHES IN LOOSE THICKNESS. PROPER EQUIPMENT SHALL BE SELECTED AND USED FOR COMPACTION ACCORDING TO THE TYPE A BACKFILL MATERIAL USED. COMPACTION RATIO SHALL BE 95% MINIMUM.

WHERE REQUIRED, STEP FOOTINGS IN A RATIO OF 2 HORIZONTAL TO 1 VERTICAL.

FOOTING EXCAVATION SHALL BE INSPECTED BY THE BUILDING OFFICIAL PRIOR TO POURING CONCRETE. NO EXCAVATION SHALL BE CLOSER THAN AT A SLOPE OF 2 HORIZONTAL TO 1 VERTICAL TO A FOOTING.

DESIGN IS BASED ON WATER TABLE=2'-0"(MIN) BELOW BOTTOM OF ALL CONCRETE SLABS AND FOOTINGS.

FOOTINGS ADJACENT TO SLOPES GREATER THAN 30% MUST COMPLY WITH SECTIONS R602.11 - R 602.11.4

FOOTINGS SHALL BE PLACED ON THE SAME DAY THAT THE EXCAVATIONS ARE MADE TO THE FINAL GRADE.

THE TOP OF ALL EXTERIOR FOOTINGS SHALL BE PLACED A MINIMUM OF 2'-0" BELOW FINISH GRADE BEARING BELOW FROST LINE DEPTH. THE TOP OF INTERIOR FOOTINGS SHALL BE PLACED A MINIMUM OF 0'-8" BELOW FINISH FLOOR.

A STRUCTURAL SLAB SHALL BE USED WHEN UNCOMPACTED FILL EXCEEDS 8"

ALL FRAMING SHALL BE A MINIMUM OF 8" ABOVE GRADE AND ALL WOOD SIDING SHALL BE 6" ABOVE GRADE.

ANCHOR BOLTS SHALL BE A MAXIMUM OF 12" FROM PLATE ENDS, SPACED AT 8'-0" O.C. (MAX), AND HAVE A MINIMUM OF (2) PER PLATE SECTION IN LINE OF ANCHOR BOLTS. THE TRADE SUB-CONTRACTOR MAY USE ANCHOR STRIPS INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

PROVIDE 4" MIN. DRAIN TILE AT BOTTOM OF ALL EXTERIOR FOOTINGS AT BASEMENT WALLS. TILE TO BE SET ON 2" GRAVEL BED WITH 4'-8" GRAVEL COVER AND SHOULD DRAIN TO DAYLIGHT OR SUMP PUMP. PROVIDE 2" DRAIN TILE AT INTERIOR OF FOOTING AND BLEEDER PIPES THROUGH FOOTING AS REQUIRED BY GEOTECHNICAL ENGINEER TO DRAIN WATER UNDER SLAB. IN LIEU OF DRAIN TILE, PROPRIETARY DRAINAGE SYSTEMS MAY BE USED (EX. J-DRAIN). INSTALL PROPRIETARY DRAINAGE SYSTEMS PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE FREE DRAINING, GRANULAR BACKFILL (SOIL CLASS CL OR BETTER) WITH A MAXIMUM EQUIVALENT FLUID PRESSURE = 60 PSF PER FOOT OF DEPTH AGAINST BASEMENT AND RETAINING WALLS. IF BACKFILL PRESSURE EXCEEDS 60 PSF, THEN WALL MUST BE DESIGNED FOR ACTUAL PRESSURES BY STRUCTURAL ENGINEER.

PARTIAL FOUNDATION DRAINS SHALL BE INSTALLED BY CONCRETE SUBELECTOR SUB-CONTRACTOR, BUT LOCATED AT BUILDER'S DISCRETION ACCORDING TO LOCAL SITE CONDITIONS.

DRAIN DISCHARGE TO CONFORM WITH APPROVED SITE PLAN. SUMP CROCK TO BE INSTALLED BY CONCRETE SUBELECTOR SUB-CONTRACTOR. LOCATED BY BUILDER. NO AHEADWAY DRAINS OR CONDENSATE DRAINS SHALL BE TIED INTO THE SANITARY SEWER SYSTEM.

1/2" WATERPROOF PARGING IS TO BE APPLIED TO MASONRY PARTIAL FOUNDATIONS, BITUMINOUS WATERPROOFING WITH POWDER IN PLACE CONCRETE.

POURED IN PLACE CONCRETE PARTIAL FOUNDATION WALLS SHALL BE BRICK-FORM FACED.

THE SPACE BETWEEN THE BOTTOM OF THE FLOOR JOISTS AND THE EARTH UNDER ANY BUILDING SHALL BE PROVIDED WITH A MINIMUM NET AREA OF VENTILATION OPENINGS OF NOT LESS THAN ONE SQUARE FOOT FOR EACH 150 SQUARE FEET OF GROUND SPACE AREA. ONE SUCH VENTILATING OPENING SHALL BE WITHIN 3' OF EACH CORNER OF THE BUILDING.

CAST-IN-PLACE CONCRETE

ALL CONCRETE SHALL BE MADE IN ACCORDANCE WITH DESIGN MIXES WHICH ARE TO BE APPROVED BY THE ARCHITECT OR ENGINEER PRIOR TO CASTING ANY CONCRETE. MIXES SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTION ACI 308. ALL PLAN CONCRETE TO CONFORM TO ACI 308.1 AND ACI 302 GUIDE TO RESTRICTION. CAST IN PLACE CONCRETE CONSTRUCTION MIXES SHALL HAVE A MINIMUM CEMENT CONTENT OF 520 LB. PER CUBIC YD., MAXIMUM WATER-CEMENT RATIO OF 0.53 FOR INTERIOR CONCRETE PROTECTED FROM FREEZING AND 0.45 FOR ALL EXTERIOR EXPOSED CONCRETE.

LOCATION	COMP. STRENGTH	SLUMP	NAIL SIZE (LENGTH x DIAMETER IN INCHES)					
			3/4" x 0.162"	3/4" x 0.148"	3/4" x 0.148"	3/4" x 0.135"	3/4" x 0.131"	2 1/2" x 0.131"
BASEMENT WALLS AND FDN NOT EXPOSED TO WEATHER	3,000 psi (I)	4" +/- 1"	3	3	3	3	3	3
BASEMENT SLABS AND INTERIOR SLABS ON GRADE	3,000 psi (I)	4" +/- 1"	3	3	3	3	3	3
BASEMENT WALLS, FDN, EXTERIOR WALLS AND OTHER CONCRETE EXPOSED TO WEATHER	3,000 psi (2)	4" +/- 1"	3	3	3	3	3	3
DRIVEWAYS, CURBS, WALKS, PATIOS STEPS AND UNHEATED GARAGE FLOORS EXPOSED TO WEATHER	3,000 psi (2)	4" +/- 1"	3	3	3	3	3	3

NOTES:
1. EXTERIOR-EXPOSED CONCRETE AND CONCRETE SUBJECTED TO FREEZE AND THAW CONDITIONS DURING CONSTRUCTION SHALL BE AIR-ENTRAINED 6% +/- 0.8% TABLE R602.2-SEVERE
2. CONCRETE SHALL BE AIR-ENTRAINED 6% +/- 0.8% TABLE R602.2-SEVERE

CONCRETE MATERIALS SHALL CONFORM TO ASTM C680, TYPE I FOR PORTLAND CEMENT AND ASTM C286 FOR AGGREGATES. WATER-REDUCING ADMIXTURES SHALL CONFORM TO ASTM C494, TYPE A (FREE OF CALCIUM CHLORIDES). AIR-ENTRAING ADMIXTURES SHALL CONFORM TO ASTM C286, AND HIGH-RANGE WATER REDUCERS (SUPER-PLASTICIZERS) SHALL CONFORM TO ASTM C494, TYPE F. FLY ASH SHALL COMPLY WITH ASTM C681 FOR CLASS F AND SHALL NOT BE PROPORTIONED IN MIXES WITH MORE THAN 20% CEMENT BY WEIGHT. LIQUID-MEMBRANE CURING COMPOUNDS SHALL BE HIGH-SOLIDS, WATER AND ACRYLIC-BASED COMPLYING WITH ASTM C204 AS TESTED UNDER ASTM C286. SLUMP OF THE CONCRETE SHALL BE A MINIMUM OF 4-INCHES AND A MAXIMUM 8-INCHES. SEE THE PROJECT SPECIFICATIONS. THE COMPRESSIVE STRENGTH IS BASED 28-DAY COMPRESSIVE STRENGTH.

REBAR SHALL BE HIGH STRENGTH NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60 (80,000 psi). DEFORMED WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-15

REINFORCING PROTECTION SHALL BE AS FOLLOWS:
FOOTINGS AND OTHER CONCRETE PLACED AGAINST EARTH 3"
FORMED CONCRETE EXPOSED TO EARTH 2"
FORMED CONCRETE NOT EXPOSED TO EARTH 1 1/2"
SLABS ON GRADE UNLESS NOTED OTHERWISE MID-DEPTH OF SLAB

SLAB ISOLATION JOINTS: PROVIDE PRE-MOLDED JOINT FILLER AROUND ALL PIPING, PIERS AND PARTIAL FOUNDATION WALLS.

ALL CONCRETE TO BE PLACED IN THE CELLS OF CONCRETE MASONRY UNITS (CMU BLOCK FILL), OR IN THE VOIDS OF BRICK MASONRY CONSTRUCTION SHALL CONTAIN PER GRAVEL 3/8" DIA. STONE IN LIEU OF COARSE AGGREGATE. THE CONCRETE MIX SHALL CONTAIN A HIGH-RANGE WATER REDUCER (SUPER-PLASTICIZER). SLUMP OF THE CONCRETE SHALL BE A MINIMUM OF 6" AND A MAXIMUM OF 4". SEE THE PROJECT SPECIFICATIONS.

ALL EXTERIOR CONCRETE AND CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED, 6% +/- 0.8%. USE OF ADDITIVES SHALL NOT BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER. USE OF ADDITIVES CONTAINING CALCIUM CHLORIDE SHALL NOT BE PERMITTED. DO NOT USE HIGH-RANGE WATER REDUCING ADMIXTURES IN AIR-ENTRAINED CONCRETE. CONFORM TO ASTM C286.

ADDITION OF WATER TO THE CONCRETE AT THE JOB SITE FOR THE PURPOSE OF INCREASING THE SLUMP OR FOR RETEMPERING THE CONCRETE WHICH HAS BEGUN TO SET IS STRICTLY PROHIBITED. SEE THE PROJECT SPECIFICATIONS FOR REQUIREMENTS OF WATER ADDITION TO CONCRETE AT THE JOBSITE.

SLABS ON GRADE SHALL BE 4" THICK CONCRETE AND REINFORCED WITH 6x6 W-40M4 MWF (PLAT SHEETS) WELDED WIRE FABRIC SHALL BE SUPPORTED ON HIGH CHAIRS SO THAT THE FABRIC IS POSITIONED AT MID-DEPTH OF THE SLAB THICKNESS. LAP ONE FULL MESH PLUS 2" AT SPICES IN EACH DIRECTION. PLACE CONCRETE OVER 10 MIL POLYETHYLENE VAPOR BARRIER AND 4" MINIMUM ASTM C39 NO.4 OR NO.6-40# VOID. THE AGGREGATE LAYER SHALL BE PLACED OVER FIRM NATURAL SUBGRADE OR ON COMPACTED AND CONTROLLED FILL. FILL UNDER SLABS SHALL BE COMPACTED IN 8 INCH LAYERS TO 95% MAX. DENSITY. USE AIR-ENTRAINED AT ALL EXTERIOR SLABS.

CONCRETE FOR SLABS-ON-GRADE SHALL BE PLACED IN A SEQUENCE AND MANNER THAT IS CONSISTENT WITH THE RECOMMENDATIONS OF THE AMERICAN CONCRETE INSTITUTE. LOCATE CONSTRUCTION AND CONTROL JOINTS IN SUCH A WAY TO MINIMIZE THE EFFECTS OF SHRINKAGE OF THE CONCRETE. SLAB SECTIONS, SUBMIT TO THE ARCHITECT/ENGINEER THE SEQUENCE AND METHOD OF CASTING CONCRETE SLABS-ON-GRADE PRIOR TO PLACING THESE ELEMENTS. POUR SLABS IN ALTERNATE PANELS WITH A MAXIMUM OF 600 SF AND PROVIDE CONTROL AND CONSTRUCTION JOINTS AT 8'-0" MAXIMUM OR AS REQUIRED TO PREVENT UNCONTROLLED CRACKING.

SLAB CONTROL JOINTS: SAW CUT OR FORM TO 1/5 SLAB DEPTH. SPACE NO MORE THAN 15 FEET APART. DISCONTINUE WELDED WIRE FABRIC AT CONTROL JOINTS. PROVIDE JOINTS ON GROUND SUPPORTED SLABS IN RECTANGULAR CONFIGURATION WITH THE LARGER SIDE NO MORE THAN ONE-AND-ONE-HALF TIMES THE LENGTH OF THE SHORTER SIDE.

THE TRADE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ANCHOR BOLTS, CLIPS, INSERTS, CONNECTION PLATES, SLEEVES, SLOTS AND OTHER REQUIRED ITEMS IN ACCORDANCE WITH THE CONTRACT DRAWINGS, AND IN COOPERATION WITH OTHER TRADES PRIOR TO PLACING CONCRETE.

ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI'S MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES, (ACI-318). DETAILS OF REINFORCEMENT SHALL CONFORM TO ACI 308, ACI 305, AND CRSI STANDARDS.

ALL REINFORCING STEEL (INCLUDING WELDED WIRE FABRIC) SHALL BE SECURELY TIED AND ANCHORED IN PLACE TO PREVENT DISLOCATION DURING THE LACING OPERATION.

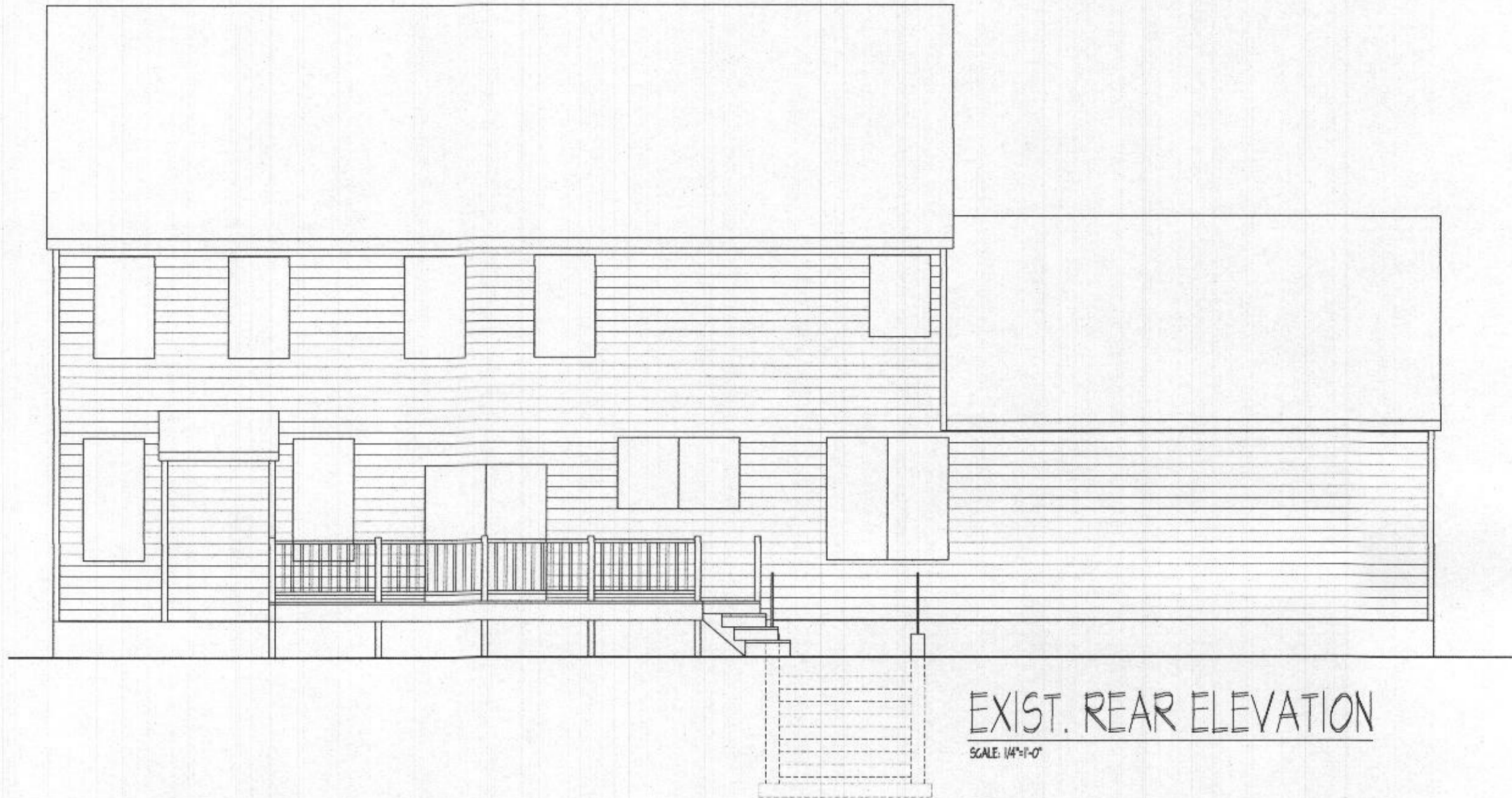
REINFORCING STEEL SHALL BE CLEAN OF MUD, DEBRIS, LOOSE RUST, CEMENT, GROUT, OR ANY OTHER MATERIAL WHICH MAY INHIBIT THE BOND BETWEEN THE STEEL AND CONCRETE.

AT CORNERS, ALL HORIZONTAL REINFORCEMENT SHALL EXTEND AROUND CORNER AND LAP REINFORCEMENT SHALL BE A MINIMUM OF 30 BAR DIAMETERS 44-157, 84-147). PROVIDE CORNERS BETWEEN ALL FOOTINGS, WALLS AND PIERS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCING.

DRY PACK SHALL CONSIST OF SIKA GROUT 212 OR APPROVED SUBSTITUTE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

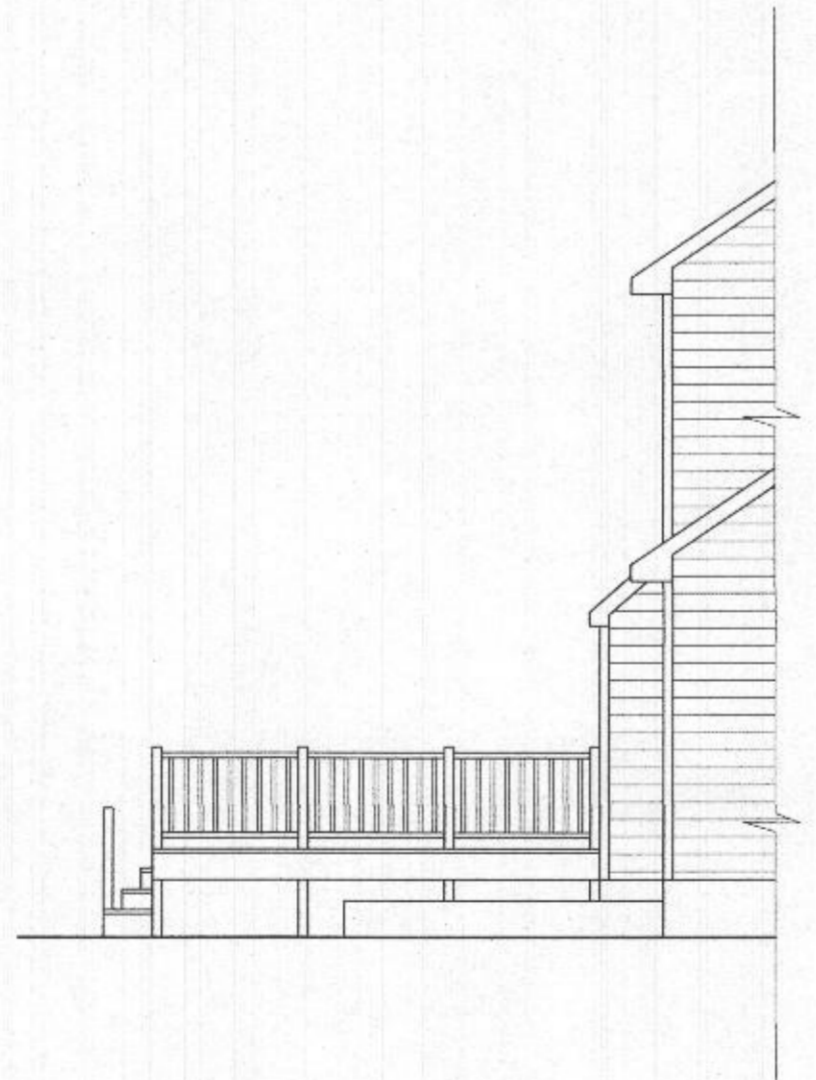
PARTIAL FASTENING SCHEDULE

DETAIL	CONNECTION	NAIL SIZE (LENGTH x DIAMETER IN INCHES)					
		3/4" x 0.162"	3/4" x 0.148"	3/4" x 0.148"	3/4" x 0.135"	3/4" x 0.131"	2 1/2" x 0.131"
	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE (TOE NAIL - EACH END)	3	3	3	3	3	3
	CEILING JOISTS TO TOP PLATE (TOE NAIL)	3	3	3	3	3	3
	CEILING JOIST, LAP OVER PARTITION (NO THRUST) (FACE NAIL)	3	4	4	4	4	4
	CEILING JOIST TO PARALLEL RAFTER	SEE IRC TABLE R602.5.1(9)					
	COLLAR TIE TO RAFTER (FACE NAIL)	3	3	3	4	4	5
	RAFTER / TRUSS TO PLATE (TOE NAIL)	3	3	3	3	4	4
	RAFTER TO RIDGE, VALLEY OR HIP RAFTER OR ROOF RAFTER (END NAIL)	3	4	4	4	5	5
	RAFTER TO RIDGE, VALLEY OR HIP RAFTER OR ROOF RAFTER (TOE NAIL)	3	4	4			
	STUD TO STUD (FACE NAIL) (NOT AT BRACED PANEL)	24" O.C.	16" O.C.	16" O.C.	16" O.C.	16" O.C.	8" O.C.
	ABUTTING STUDS AT CORNERS AND INTERSECTION (FACE NAIL) (NOT AT BRACED PANEL)	12" O.C.	12" O.C.	12" O.C.	12" O.C.	8" O.C.	8" O.C.
	STUD TO STUD (FACE NAIL) (AT BRACED PANEL)	16" O.C.	12" O.C.	12" O.C.	12" O.C.	12" O.C.	12" O.C.
	ABUTTING STUDS AT CORNERS AND INTERSECTION (FACE NAIL) (AT BRACED PANEL)	12" O.C.					



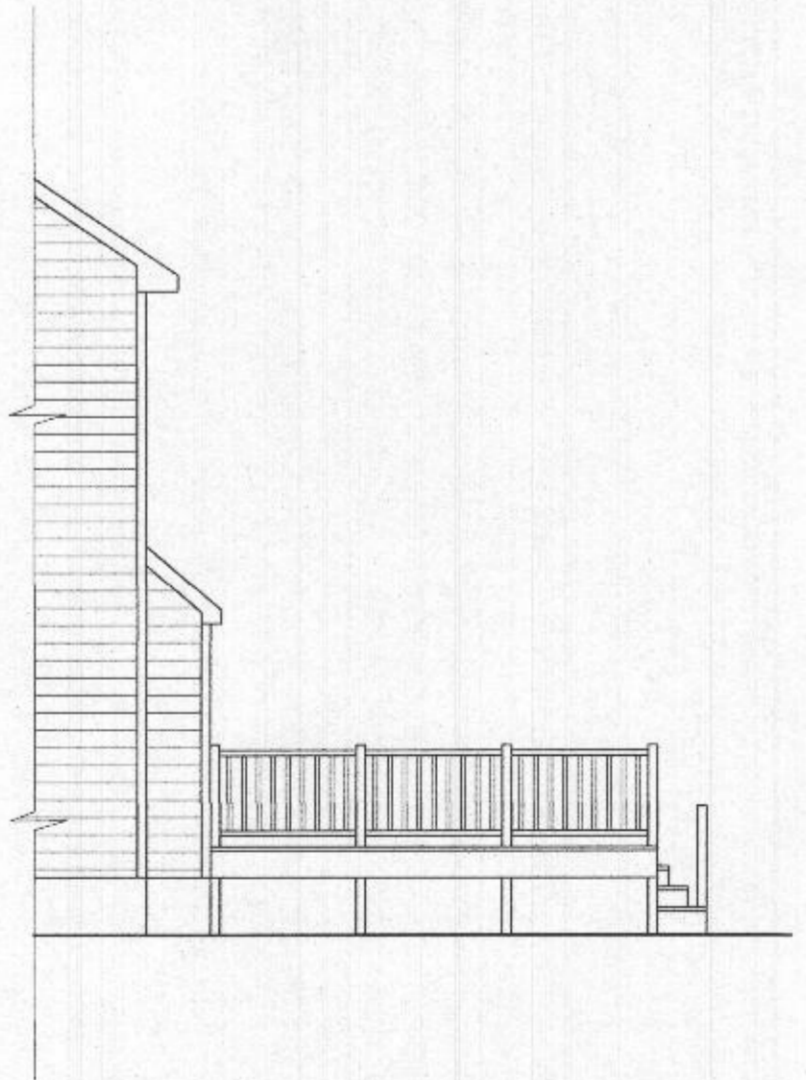
EXIST. REAR ELEVATION

SCALE: 1/4"=1'-0"



EXIST. LEFT SIDE ELEVATION

SCALE: 1/4"=1'-0"



EXIST. RIGHT SIDE ELEVATION

SCALE: 1/4"=1'-0"

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FAX (410) 665-4084
EMAIL: JON.BRODERS@JBD.COM

EXIST. SIDE AND REAR ELEVATIONS

CONTENTS

SCALE: 1/4" = 1'-0"

SHEET NO.

EX-1

DATE:

BY:

DATE:

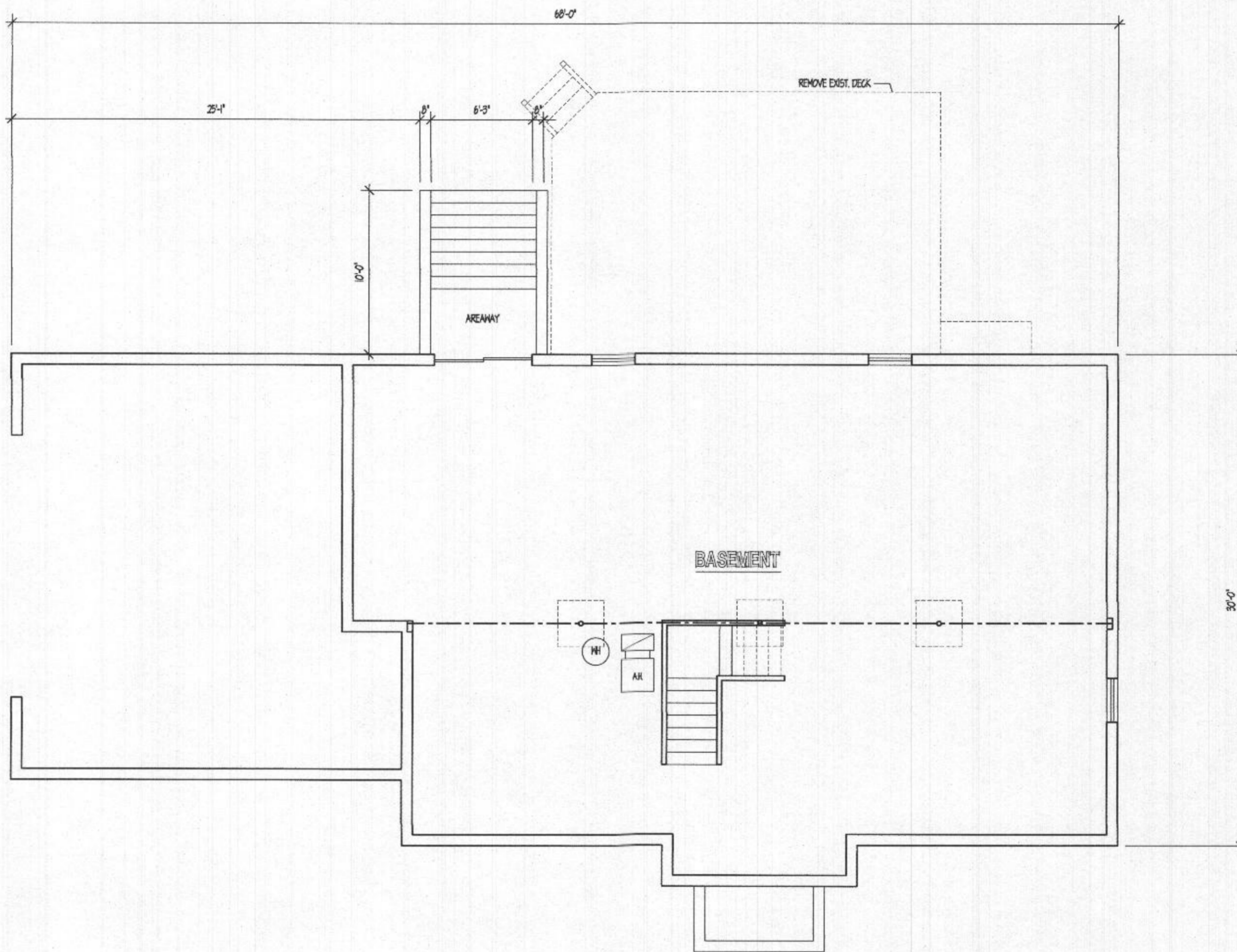
BY:

DATE:

BY:

ZUGGO ADDITION

PROJECT TITLE:



EXIST. FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

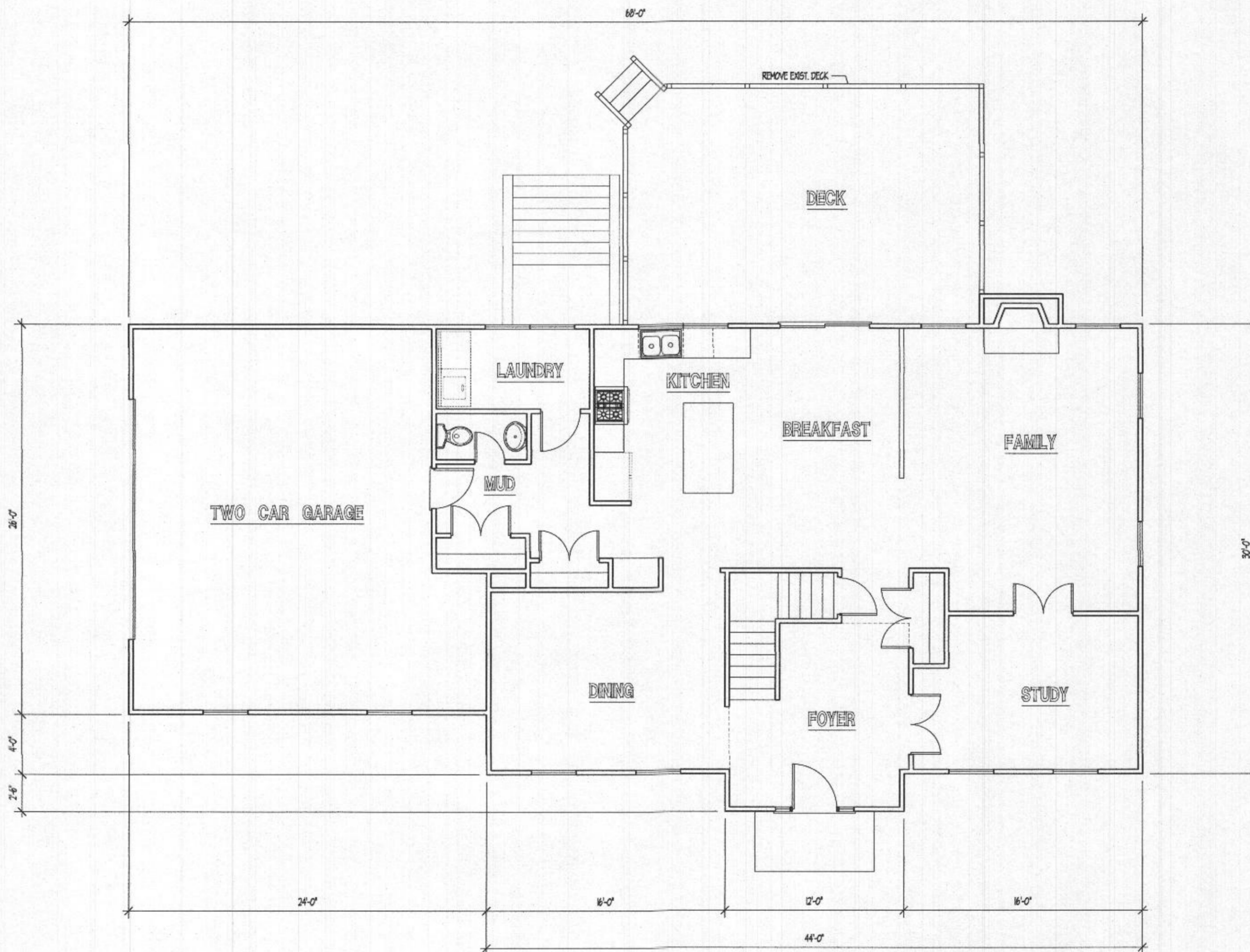
EX-2

ISSUE	DATE	BY

CONTENTS	SCALE: 1/4" = 1'-0"	DATE:	BY:	PROJECT:

EXIST. FOUNDATION PLAN
ZUGGO ADDITION

JB HOME DESIGN, LLC
 446 CONCORD COURT
 BALTIMORE, MARYLAND 2124
 OFFICE (410) 594-8901
 FAX (410) 668-4064
 EMAIL: JON@JBHOMEDSIGN.COM



EXIST. FIRST FLOOR PLAN
SCALE 1/4"=1'-0"

JB HOME DESIGN, LLC
 416 CONCORD COURT
 BALTIMORE, MARYLAND 2124
 OFFICE (410) 594-6371
 FAX (410) 665-4264
 EMAIL: JON@JBDESIGN.COM

EXIST. FIRST FLOOR PLAN

CONTENTS

SCALE: 1/4" = 1'-0"

DATE: _____

BY: _____

PROJECT TITLE:

ISSUE

NO.

DATE

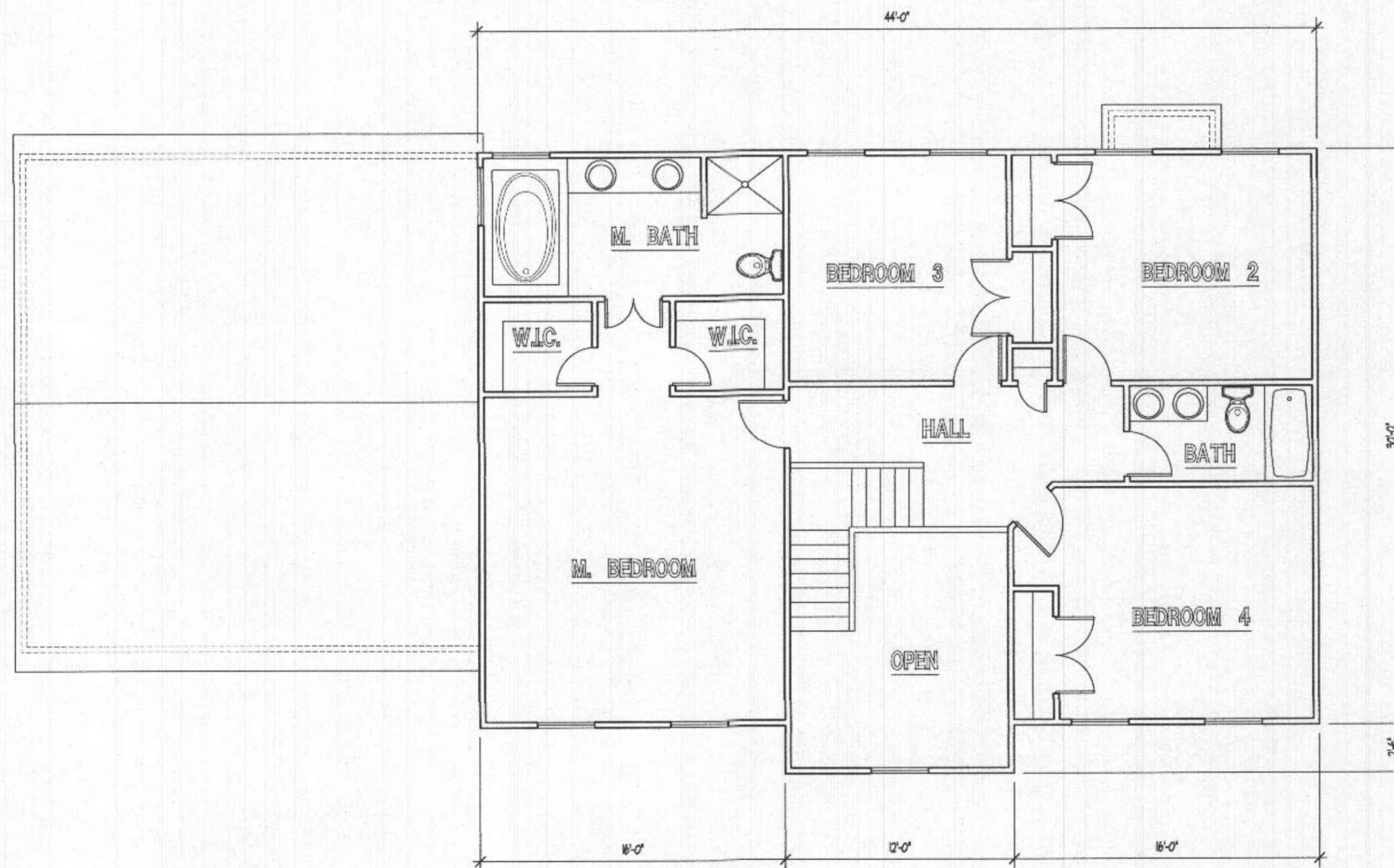
DESCRIPTION

ISSUE	NO.	DATE	DESCRIPTION


SHEET NO.

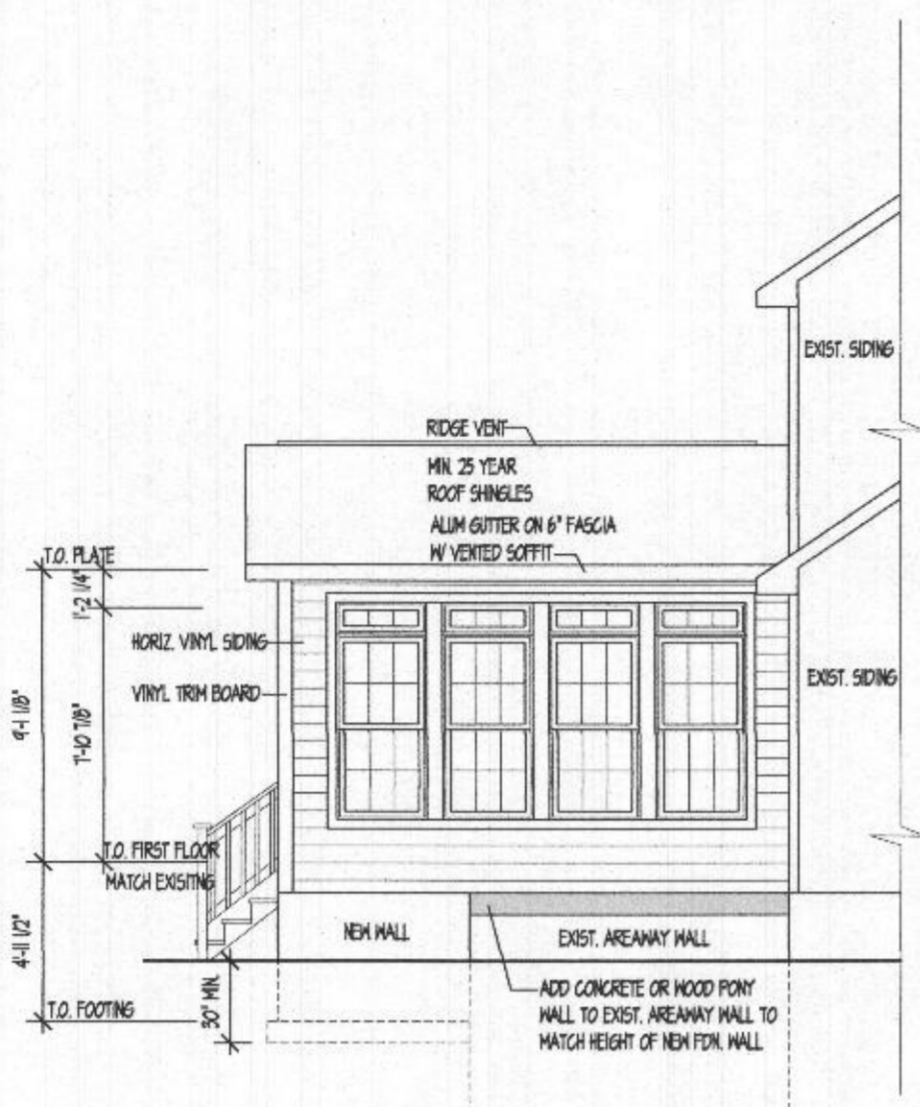
ZUGCO ADDITION

EX-3

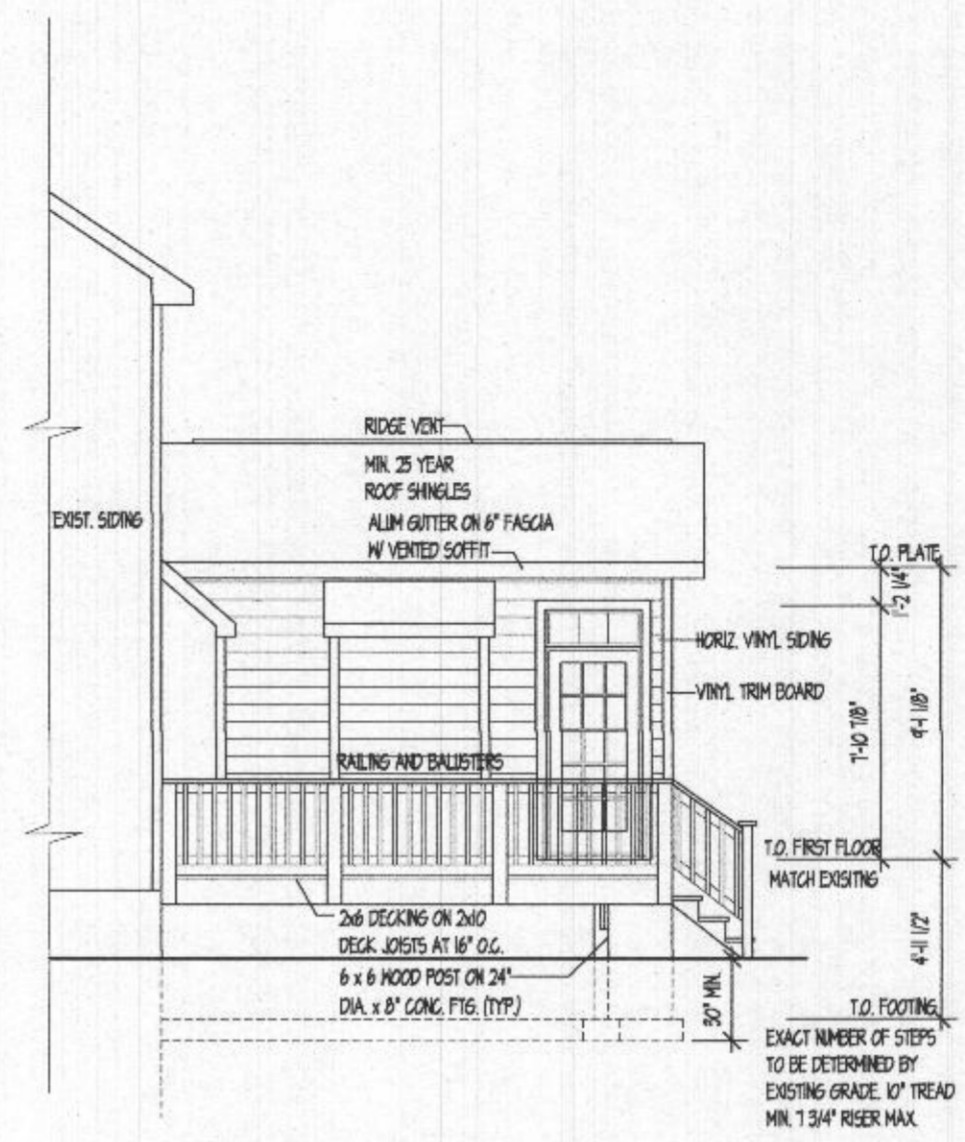


EXIST. SECOND FLOOR PLAN
SCALE 1/4"=1'-0"

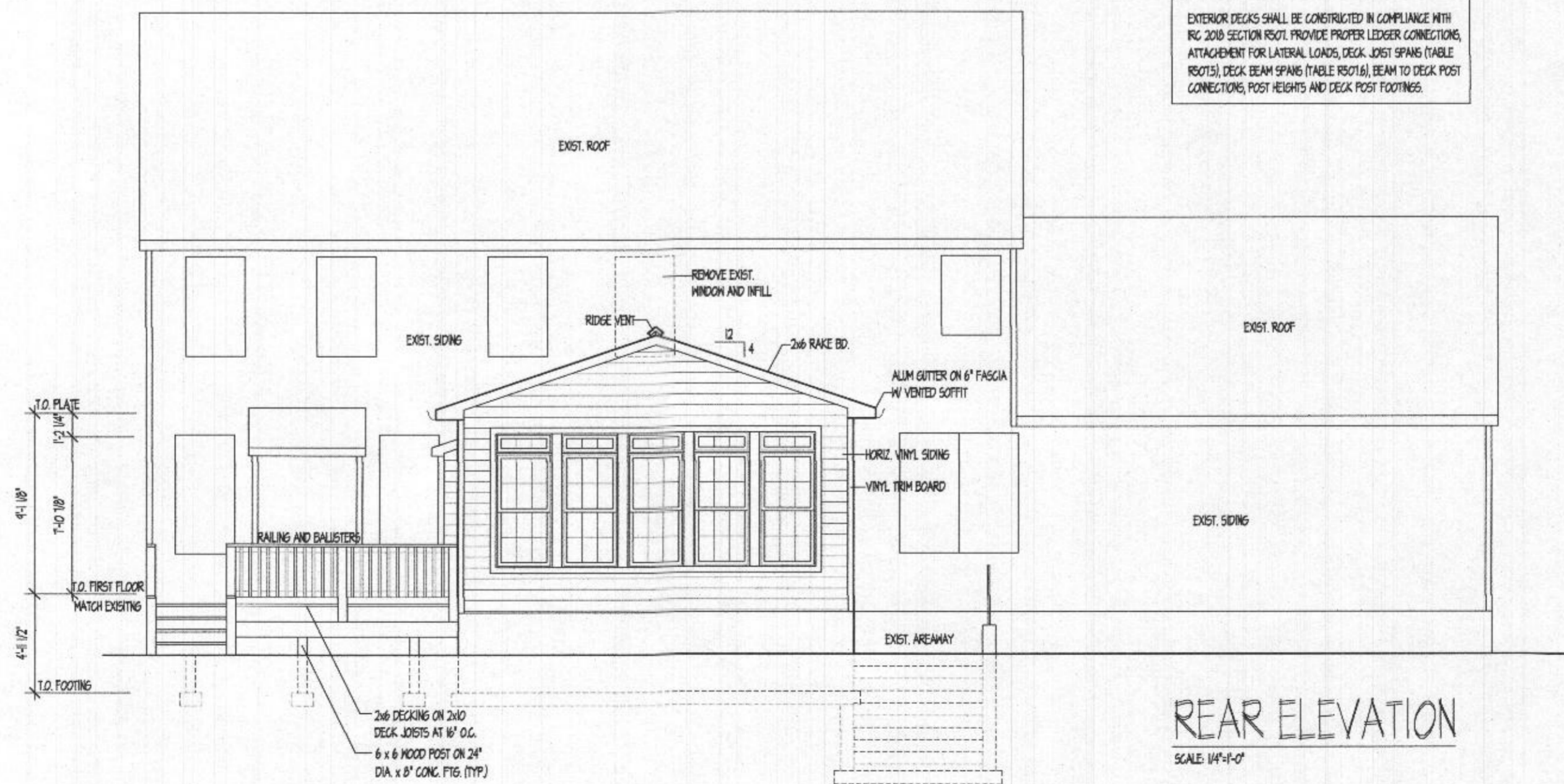
 JB HOME DESIGN, LLC <small>444 CONROD COURT BALTIMORE, MARYLAND 2124 OFFICE (410) 594-0011 FAX (410) 663-6064 EMAIL: JDM@JBDDESIGN.COM</small>	
<p>EXIST. SECOND FLOOR PLAN</p>	
<p>CONTENTS</p>	<p>DATE</p>
<p>SCALE: 1/4" = 1'-0"</p>	<p>DRWN.</p>
<p>PROJECT TITLE: ZUGGO ADDITION</p>	
<p>ISSUE</p>	<p>PRJ. NO.</p>
<p>2007/01/15</p>	<p></p>
<p>SHEET NO.</p>	<p></p>
<p>EX-4</p>	



LEFT SIDE ELEVATION
SCALE: 1/4"=1'-0"



RIGHT SIDE ELEVATION
SCALE: 1/4"=1'-0"



REAR ELEVATION
SCALE: 1/4"=1'-0"

EXTERIOR DECKS SHALL BE CONSTRUCTED IN COMPLIANCE WITH IRC 2018 SECTION R501. PROVIDE PROPER LEDGER CONNECTIONS, ATTACHMENT FOR LATERAL LOADS, DECK JOIST SPANS (TABLE R501.6), DECK BEAM SPANS (TABLE R501.6), BEAM TO DECK POST CONNECTIONS, POST HEIGHTS AND DECK POST FOOTINGS.

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EMAIL: JON.BHOWDESIGN.COM

JB
home design

SIDE AND REAR ELEVATIONS

DATE: _____ DRAWN: _____ PRJ./T. NO. _____

SCALE: 1/4" = 1'-0" PROJECT TITLE: **ZUCCO ADDITION**

ISSUE	DESCRIPTION	DATE	BY	CHECKED	APP. NO.

SHEET NO. **A-1**